
**tran
sistor**

handbook

ISTRUZIONI D'USO

Nel preparare questo manuale di equivalenze per transistor si sono esaminate attentamente le caratteristiche di ogni semiconduttore, confrontandole con quelle di tutti gli esemplari di tipo affine, in modo che il transistor da noi indicato come « equivalente » possa tranquillamente essere sostituito, in qualsiasi circuito, a quello che compare nel progetto originale senza ottenere per questo alcuna sostanziale differenza di funzionamento.

Il nostro manuale risulterà dunque particolarmente utile ai radioriparatori o agli sperimentatori i quali, non riuscendo a reperire in commercio un certo tipo di transistor, sia esso di fabbricazione americana o giapponese o europea, potranno, semplicemente consultando le pagine di questo volume, trovare l'esemplare equivalente.

Ogni transistor è poi corredato della relativa zoccolatura per poter individuare immediatamente quale terminale corrisponde alla Base, quale al Collettore e quale all'Emettitore, evitando inutili perdite di tempo per andare a consultare ulteriori manuali non sempre facilmente reperibili.

L'uso del manuale è estremamente semplice in quanto i vari tipi di transistor sono stati elencati in ordine alfabetico, lasciando volutamente degli spazi bianchi alla fine di ogni gruppo di classificazione per concedere al lettore la possibilità di includervi i nuovi tipi di transistor che verranno periodicamente immessi sul mercato dalle industrie del settore, in modo da tenere continuamente aggiornato l'elenco.

Ogni tavola è poi suddivisa in 6 colonne in ognuna delle quali troverete le seguenti indicazioni:

- 1^a Colonna: è riportata la sigla del transistor di cui si cerca l'equivalente (queste sigle, come abbiamo detto, sono in ordine alfabetico)
- 2^a Colonna: è indicato il tipo di materiale con cui viene realizzato il transistor, cioè G = Germanio e S = Silicio
- 3^a Colonna: troverete una N se il transistor è un NPN e una P se è un PNP
- 4^a Colonna: serve per individuare la disposizione dei terminali: troverete infatti indicato un numero che vi permetterà di rintracciare, nelle tavole che seguono, la figura di cui avete bisogno
- 5^a Colonna: sono indicati tutti i transistor di tipo europeo o americano equivalenti a quello indicato in colonna 1
- 6^a Colonna: sono indicati tutti i transistor equivalenti di tipo giapponese.

Supponendo quindi di dover trovare l'equivalente di un qualsiasi transistor, dovremo innanzitutto ricercarci questa sigla sulla prima colonna e, una volta trovata, vedere quali sigle sono riportate in corrispondenza sulla colonna 5 o sulla colonna 6 e scegliere tra queste quella che più ci conviene; sarà poi buona norma controllarne le disposizioni dei terminali E-B-C in quanto, pur essendo il transistor scelto un equivalente, esse potrebbero

differire da quelle del transistor che vogliamo sostituire: per far questo basterà rintracciare in colonna 1 la sigla del transistor equivalente e rilevare quindi dalla colonna 4 il numero della figura che ci interessa.

Come avrete constatato questo manuale si presta quindi anche ad un secondo uso, permettendoci, quando ci troveremo di fronte ad un transistor sconosciuto, di sapere almeno se esso è un NPN o un PNP, se è al Germanio o al Silicio, ed infine come sono disposti i terminali.

CONSIGLI UTILI

Erroneamente, quando si consulta un manuale di equivalenze, si presume che, se il transistor X può essere sostituito dai transistors Y-K-J, possa avvenire anche il processo inverso, cioè che i transistors Y-K-J possano essere sostituiti, a loro volta, dal transistor X.

In realtà, invece, questo discorso non è sempre valido in quanto, in fase di preparazione di un manuale di equivalenze per transistors, non trovandone uno che abbia esattamente le stesse caratteristiche di quello da sostituire, se ne ricerca uno con caratteristiche superiori.

Può dunque succedere che, come equivalente di un transistor di AF (impiegato in un trasmettitore) la cui frequenza di taglio sia 30 MHz, ne venga indicato uno avente le stesse caratteristiche con la sola differenza che la sua frequenza di taglio è, ad esempio, 100 MHz: questo secondo transistor potrà allora essere inserito senza ombra di dubbio al posto del primo in quanto, riuscendo ad amplificare frequenze superiori, funzionerà senz'altro meglio dell'originale, ma non si potrà ovviamente compiere l'operazione inversa (cioè sostituire un transistor avente frequenza di taglio 100 MHz con uno da 30 MHz) in quanto si verrebbe a peggiorare, se non addirittura a compromettere il funzionamento del circuito. Analogamente, trovandoci a riparare un amplificatore di BF e dovendo sostituire un BD135 (che prevede una tensione massima di collettore di 45 volt), potremo benissimo impiegare per questo scopo un BD137 (tensione massima 60 volt) oppure anche un BD139 (tensione massima 80 volt), ma laddove è inserito un BD139 che venga fatto lavorare a 60 volt non potremo mai sostituire un BD137, né tantomeno un BD135 la cui tensione massima di collettore è dimezzata rispetto al primo.

Un altro errore gravissimo da evitare è poi quello di applicare la proprietà transitiva agli equivalenti, cioè dire che, se B è equivalente ad A e C è equivalente a B, C deve essere equivalente anche ad A: questo significherebbe infatti prendere un grosso granchio in quanto, ragionando in questa maniera, si arriverebbe ad ammettere che tutti i tipi di transistor esistenti sono equivalenti fra di loro.

Non lasciatevi quindi trarre in inganno da ragionamenti che potrebbero sembrare anche logici e, onde evitare errori, considerate come equivalenti di un transistor solo quelli indicati come tali di fianco ad esso.

RICERCA DEGLI EQUIVALENTI

Pur possedendo il nostro manuale, vi potrà accadere, in futuro, di trovarvi a dover sostituire dei transistors non contemplati nel medesimo in quanto immessi sul mercato dopo la sua pubblicazione; a questo scopo vorremmo ricordare che, per ogni nuovo tipo di transistor posto in vendita, ne esistono già almeno una decina di « vecchi » che possono egregiamente sostituirlo in qualsiasi applicazione: non vi sarà quindi difficile, se seguirete i nostri consigli, rintracciare tra questi tipi di transistors già in commercio quello che può essere considerato l'equivalente.

La prima cosa da farsi, quando ci si trova ad affrontare un problema di questo tipo, è di stabilire quale funzione viene svolta nel circuito dal transistor che vogliamo sostituire: ogni transistor viene infatti caratterizzato da un certo numero di parametri i più importanti dei quali sono la **potenza massima di dissipazione**, la **tensione massima di collettore**, la **corrente massima di collettore**, il **beta** e la **frequenza di taglio**, per cui, anziché con-

trollare l'equivalenza di tutti questi parametri, conoscendo il tipo di impiego a cui il componente verrà sottoposto, ci potremo limitare a verificare l'identità di due o tre parametri al massimo, essendo scontato che gli altri soddisfano le nostre esigenze.

Supponendo, ad esempio, che il nostro transistor venga impiegato in un alimentatore, non avrà nessuna importanza andarsi a controllare la **frequenza di taglio**, mentre sarà necessario che il nuovo transistor abbia un potere dissipativo perlomeno uguale (meglio ancora se superiore) a quello precedente ed inoltre dovrà riuscire a sopportare la stessa corrente e la stessa tensione di collettore.

Se invece il transistor deve lavorare in alta frequenza il parametro più importante diviene la **frequenza di taglio** cui segue immediatamente il **beta**, in quanto se inseriremo transistor che tagliano prima o amplificano di meno non otterremo certo i risultati voluti.

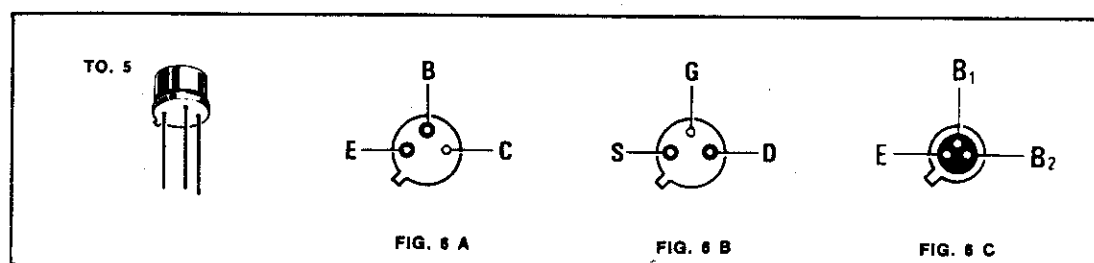
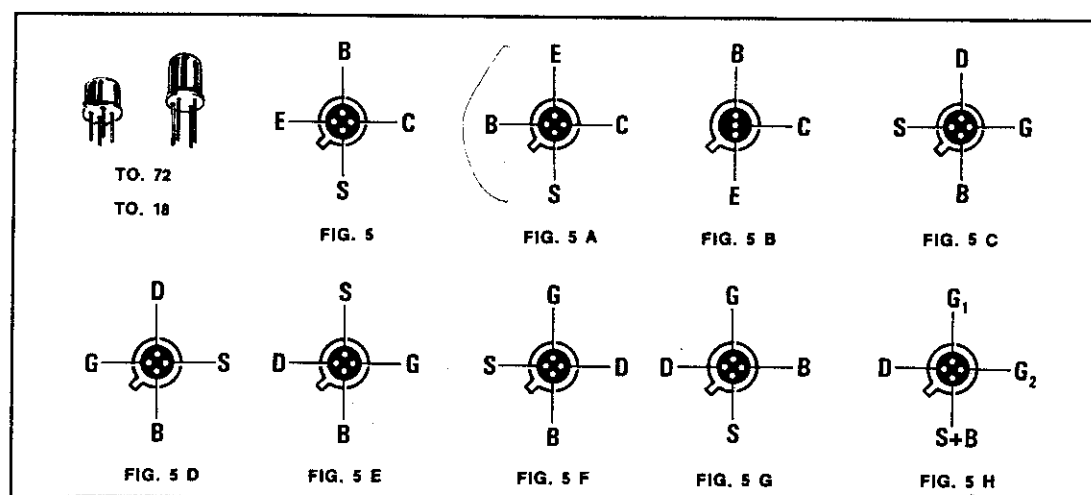
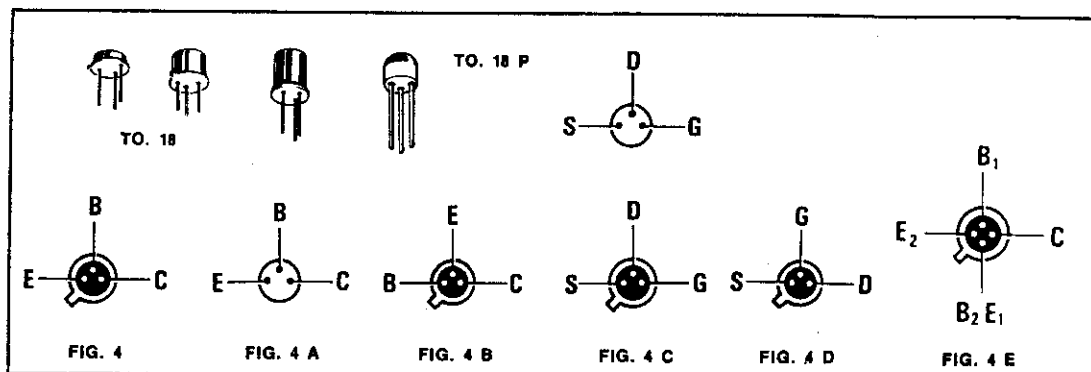
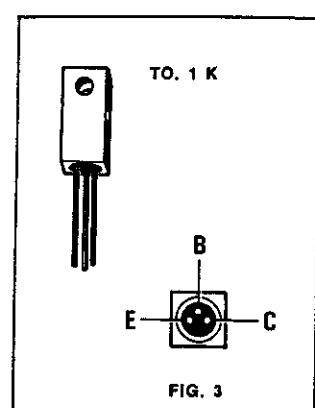
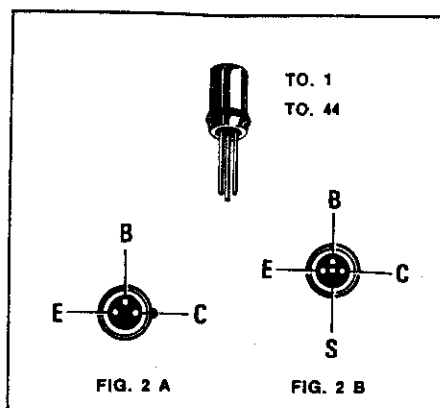
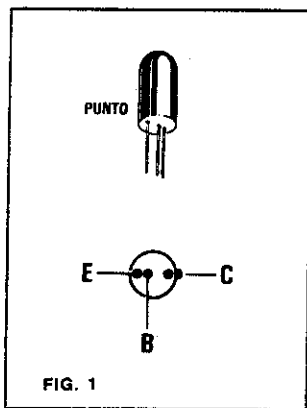
Se il transistor da sostituire viene impiegato come finale di potenza in un trasmettitore per i 27 MHz tutti i parametri sopra elencati sono egualmente importanti per cui l'equivalente dovrà possedere tutte queste caratteristiche in misura uguale o superiore all'originale: in particolare, se si tratta di un trasmettitore in AM, bisognerà che la **tensione massima di collettore** sopportabile dal transistor sia almeno quattro volte la tensione di lavoro.

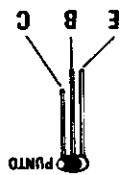
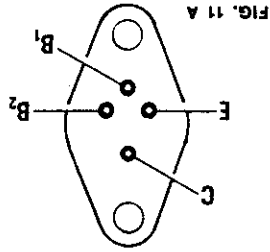
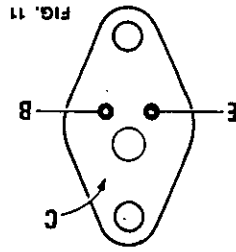
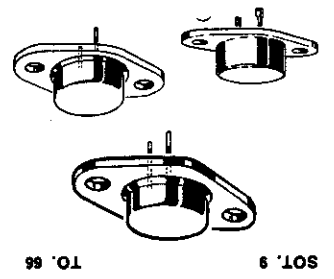
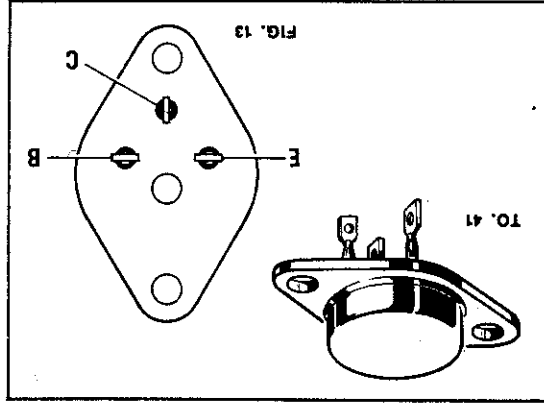
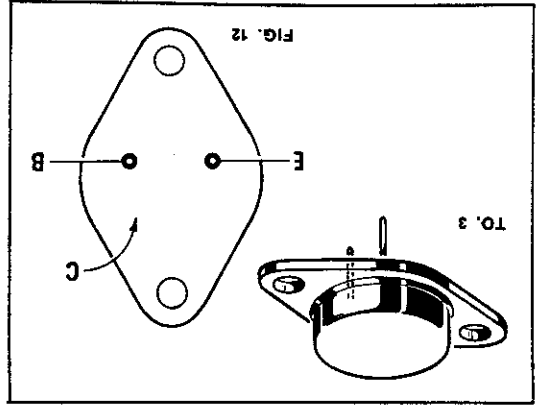
Se il transistor è inserito in un preamplificatore di BF, sarà molto importante controllare la **tensione massima di collettore**, il **beta** e la **figura di rumore**, mentre se viene impiegato come finale in un amplificatore di BF, oltre alla solita **tensione di collettore**, rivestiranno particolare importanza la **corrente massima** (sempre di collettore), la **potenza** ed il **beta**.

Trovandosi infine a dover sostituire un transistor inserito in un circuito logico, i parametri da controllare per stabilire l'equivalenza saranno totalmente diversi da quelli finora esaminati e precisamente bisognerà che il nuovo transistor abbia dei **tempi di commutazione** (tempo di ritardo, tempo di salita, tempo di immagazzinamento, tempo di discesa) uguali o più brevi di quelli del vecchio semiconduttore.

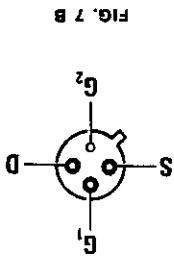
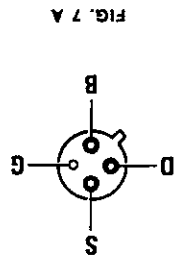
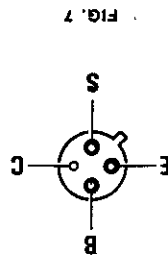
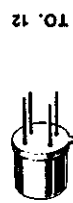
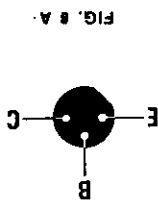
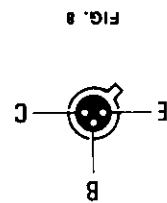
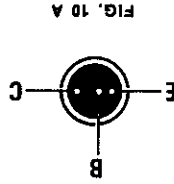
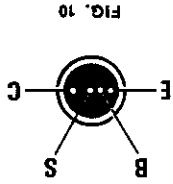
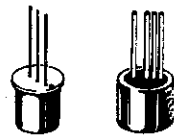
Questo secondo transistor costerà generalmente di più di quello precedente (in quanto possiede caratteristiche superiori) ma, in compenso, inserendolo in sostituzione a quello vecchio, si otterrà quasi sempre un rendimento migliore: in taluni casi sarà poi necessario ritoccare la taratura dei circuiti di sintonia, non risultando uguali le capacità interne dei due transistors.

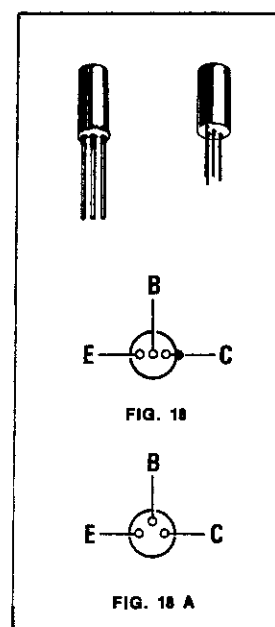
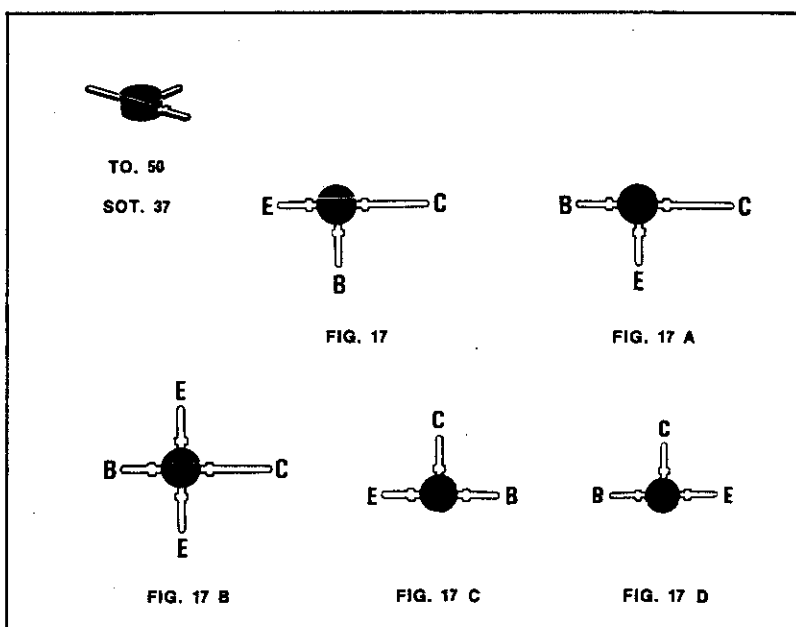
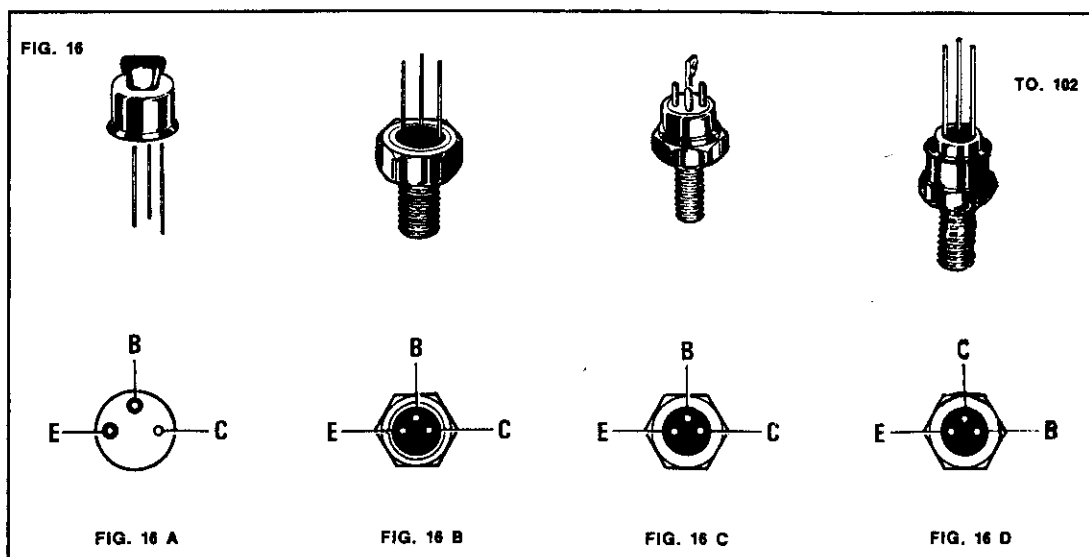
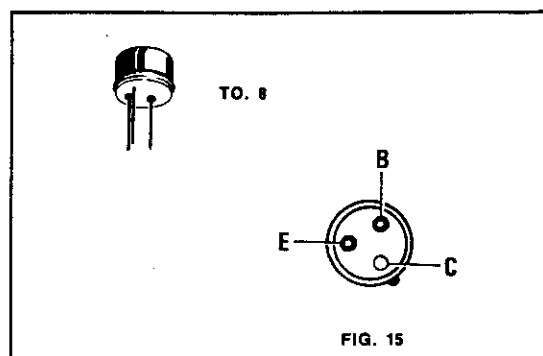
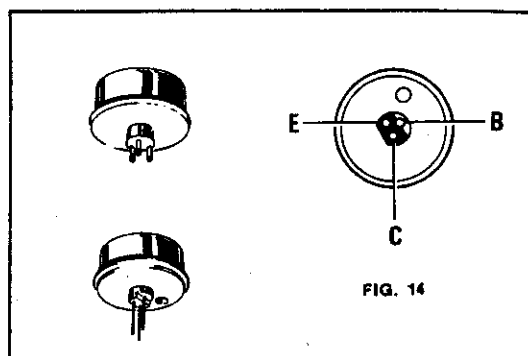
Una volta rintracciato l'equivalente di un nuovo tipo di transistor, potrete poi registrare questa corrispondenza in quegli spazi vuoti del nostro manuale che sono stati riservati proprio per questo scopo, onde consentirvi di tenerlo continuamente aggiornato.

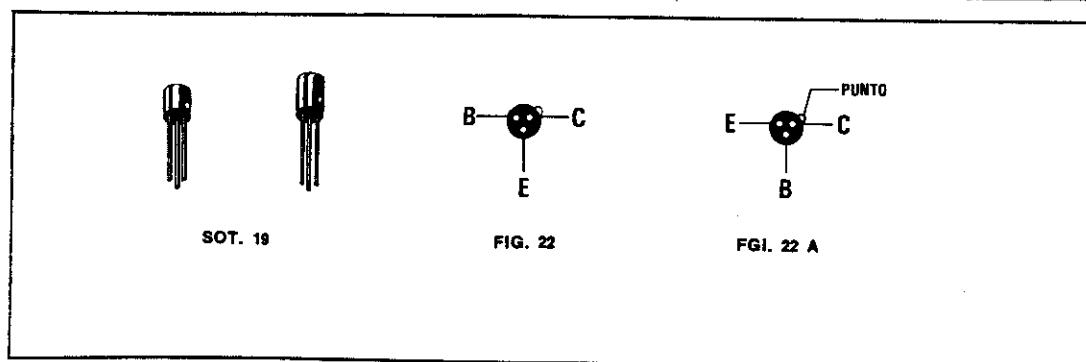
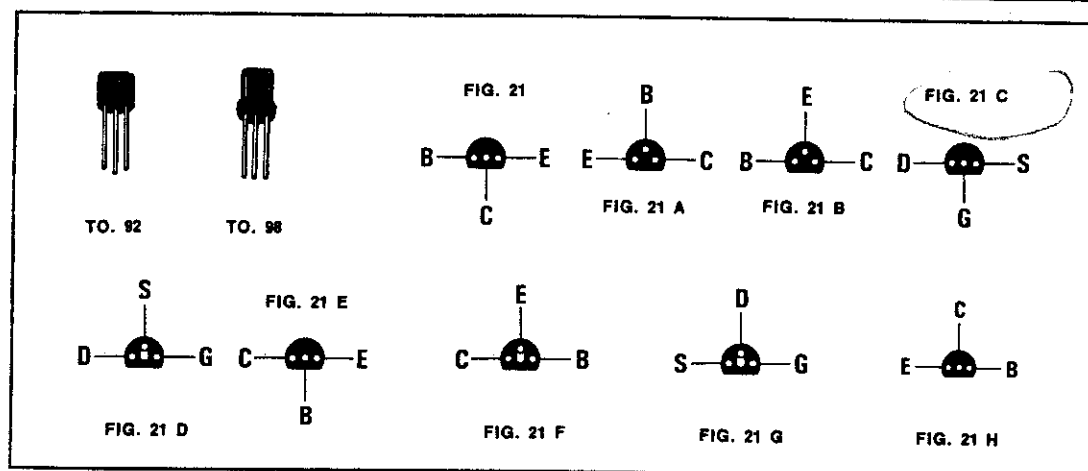
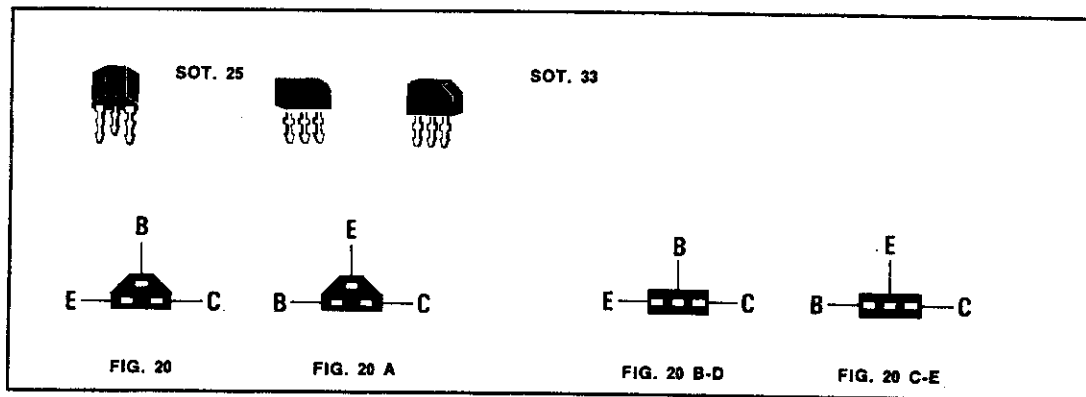
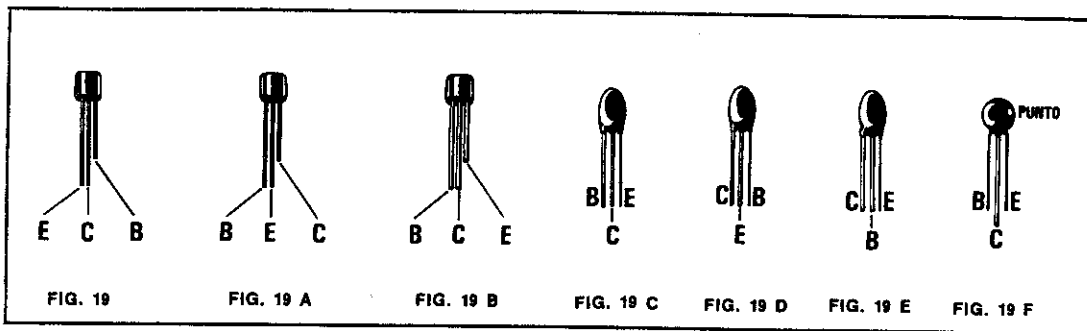


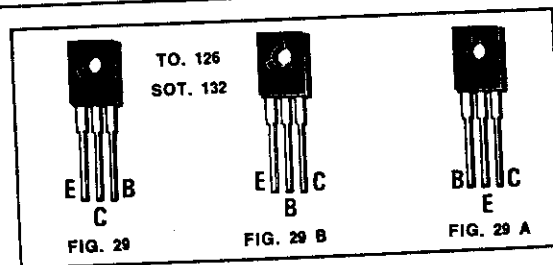
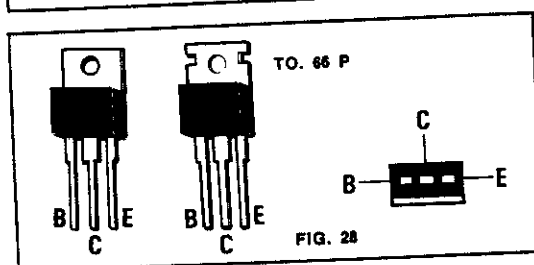
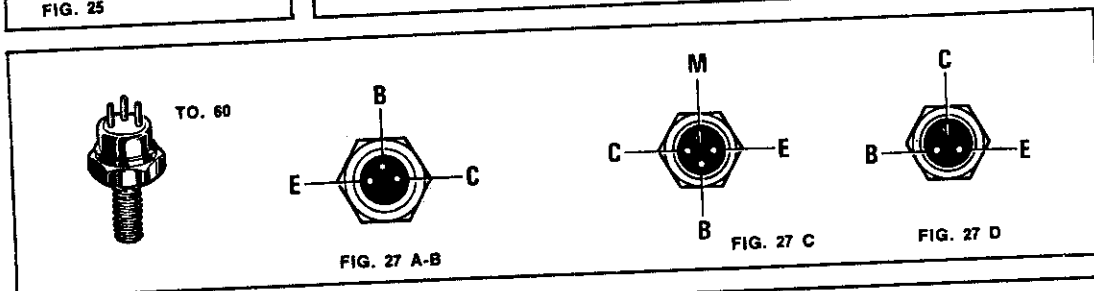
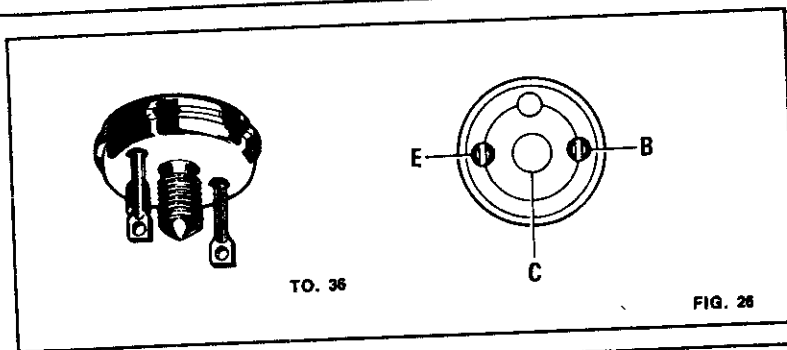
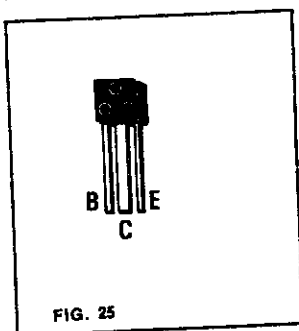
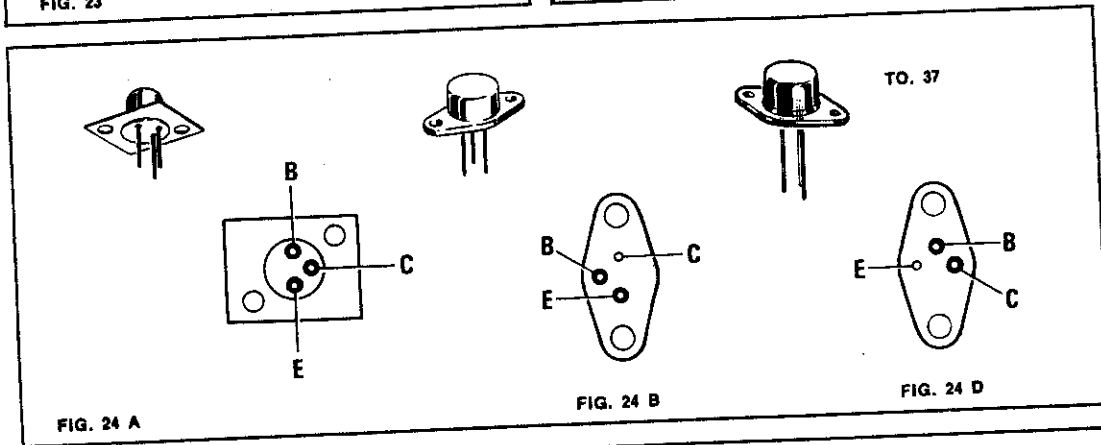
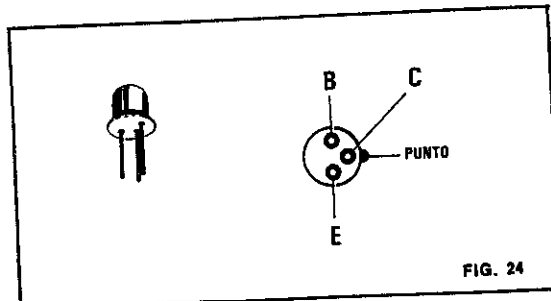
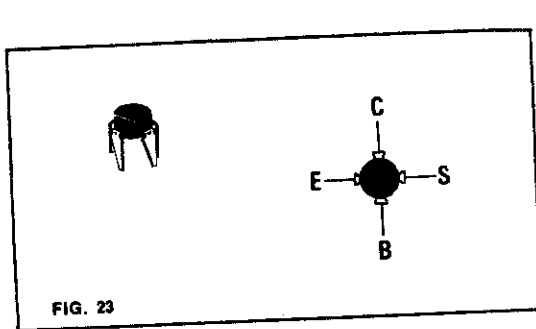


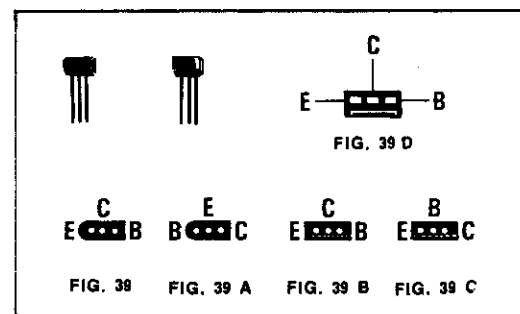
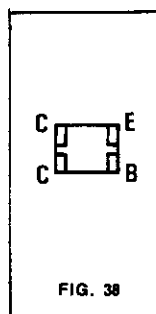
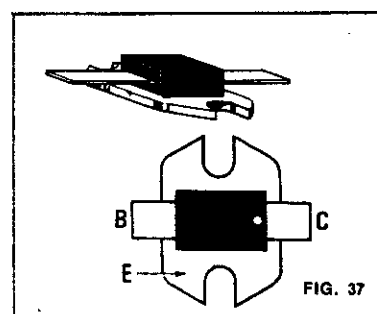
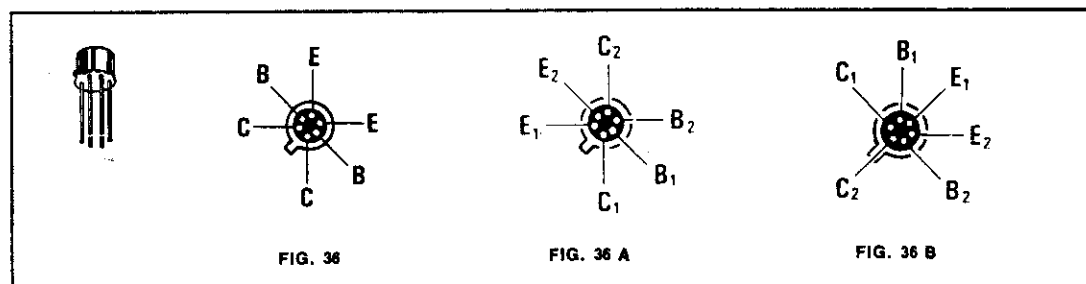
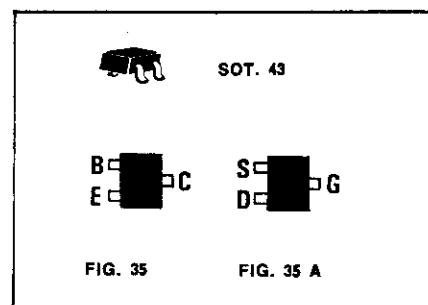
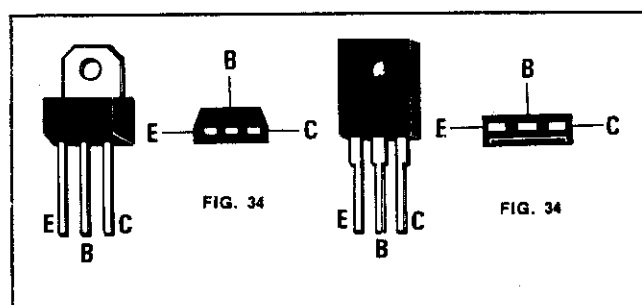
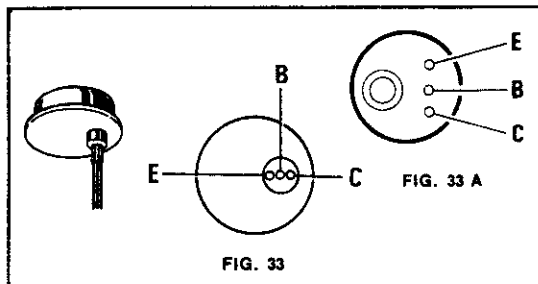
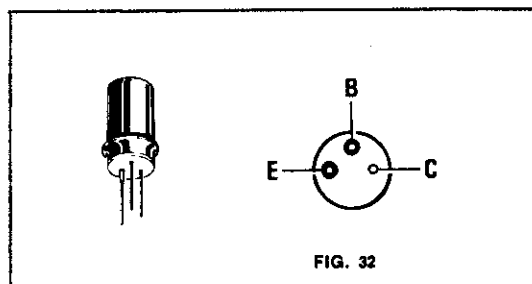
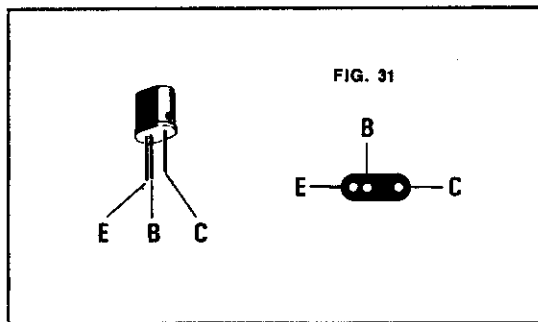
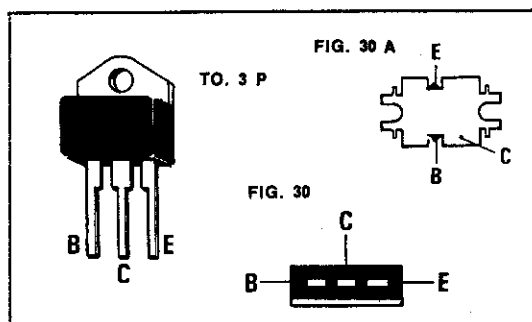
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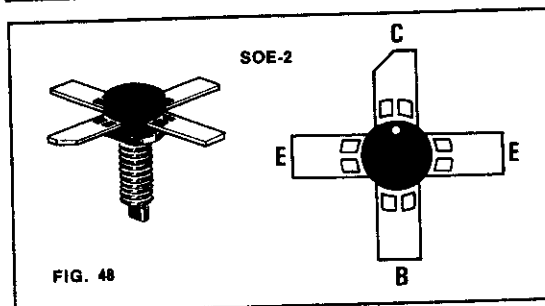
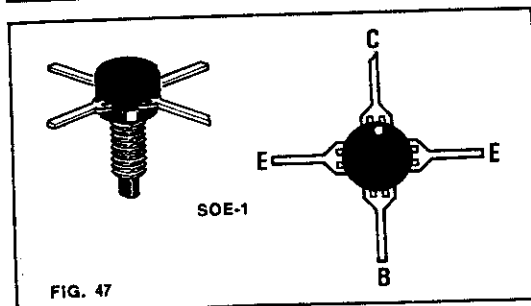
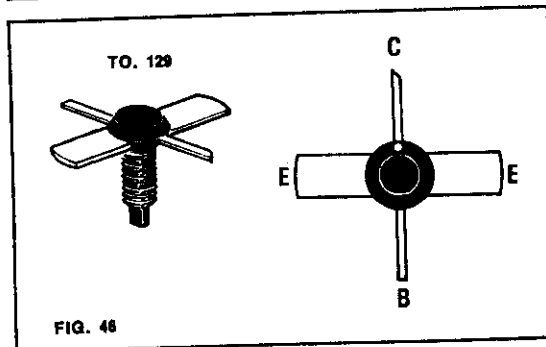
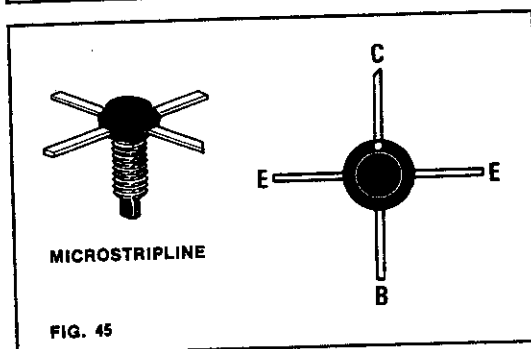
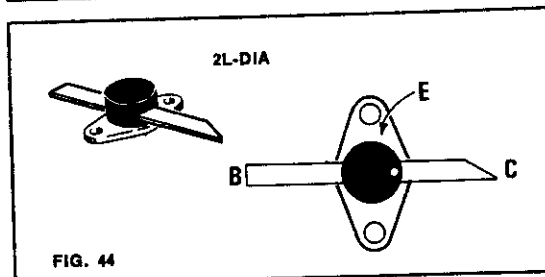
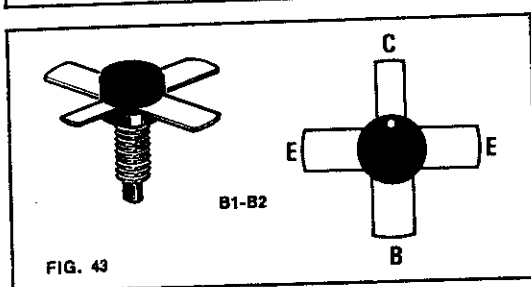
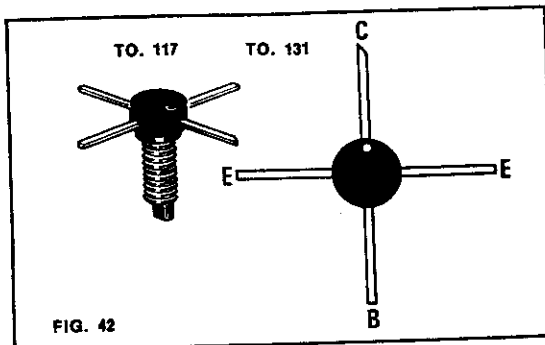
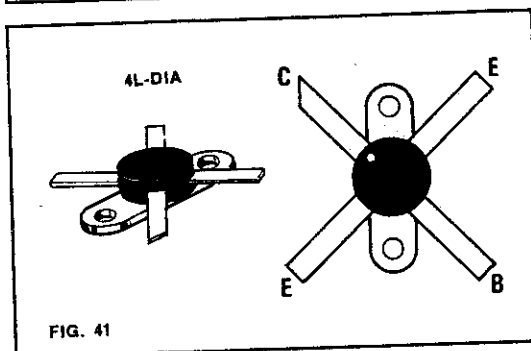
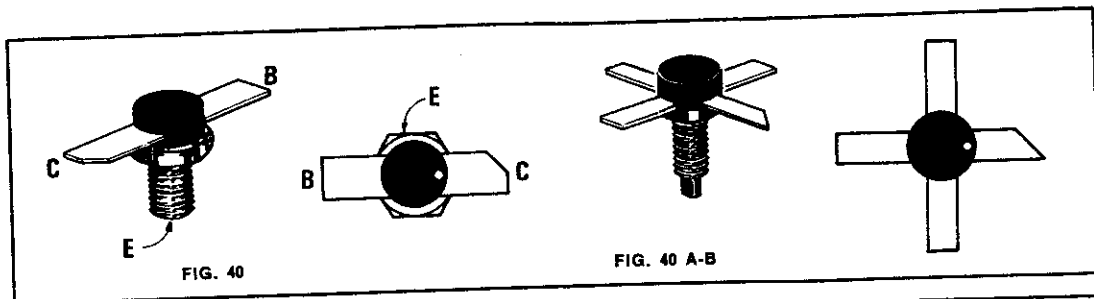












TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AC105	G	P	1	AC128-AC153-AC152-AC151-AC173-2N4106-2N2431-AC124	2SB220
AC106	G	P	1	AC128-AC131-AC153-AC173-2N4106-2N2431-AC124	2SB220
AC107	G	P	1	AC122-AC125-AC128-AC172-AC151-AC150-AC180-OC306	
AC108	G	P	2A	AC125-AC122-AC151-AC163-2N506-2N2429-OC3041	2SB219
AC109	G	P	2A	AC125-AC122-AC151-AC163-2N506-2N2429-OC30411	2SB219
AC110	G	P	2A	AC126-AC122-AC151-AC125-AC163-AC173-2N506-2N2429	2SB219
AC113	G	P	2A	AC122-AC125-AC151-AC151-SFT353-OC304-AC192	
AC114	G	P	2A	AC125-AC122-AC128-SFT353-AC151-OC30411-AC192	
AC115	G	P	2A	AC128-AC151-AC150-AC125-AC122-OC3041-AC192-A173	
AC116	G	P	3	AC126-AC151-AC163-AC196-2N610-2N2429-AC125	2SB415-2SB75
AC117	G	P	3	AC128-AC152-AC153-2N467-2N4106-2N2431	2SB415-2SB222
AC118	G	P	3	AC117-AC128-AC153-AC193	
AC119	G	P	3	AC117-AC128-AC153-AC193-AC180	
AC120	G	P	2A	AC124-AC121-AC128-AC117-AC153-2N467-2N2431-AC152	2SB222
AC121	G	P	2A	AC117-AC152-AC128-AC153-OC318-2N2431-2N1121	2SB415-2SB54-2SB156
AC122	G	P	4	AC150-AC125-AC151-AC122-AC162-2N506-2N2429-AC126	2SB364-2SB219-2SB459
AC123	G	P	3	AC126-ASY48-AC152-ASY48-2N613-2N2429-AC123-2N1191	2SB56A-2SB75A
AC124	G	P	3	AC128-AC153-OC72-2N2431-2N4106-AC193-AC180	2SB67
AC125	G	P	2A	AC151-AC122-AC162-AC163-2N2428-2N2429-AC170-2N1190-2N2613	2SB415-2SB75-2SA202
AC126	G	P	2A	AC151-AC163-AC171-2N506-2N2429-AC122-OC30511-2N1192-2N2613	2SB415-2SB77-2SB383
AC127	G	N	2A	AC176-AC179-AC186-2N430-AC194-AC185	2SD105-2SD104-2SD96
AC128	G	P	2A	AC117-AC124-AC153-2N4106-2N2431-2N1373-AC193-AC180	2SB415-2SB370
AC129	G	P	9	AC151-AC122-AC125-OC51-OC60	2SB46
AC130	G	N	2A	AC190-AC127-OC139-ASY75-SFT184	
AC131	G	P	4	AC152-AC128-AC153-AC180-2N2431-2N1924-AC131	2SB415-2SB370A
AC132	G	P	2A	AC152-AC131-AC162-AC184-2N1924-2N1008-AC193	2SB364-2SB496
AC134	G	P	2A	AC122-AC151-AC125-OC71-AC173-2N406-OC30411-AC134	

AC135

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AC135	G	P	2A	AC122-AC151-AC125-2N408-OC304111-AC139	
AC136	G	P	2A	AC122-AC125-AC131-AC151-2N109-2N217	
AC137	G	P	2A	AC126-AC127-AC128-AC151	
AC138	G	P	2A	AM54-AC152-AC122-AD148-AC125-2N456-TA2063-AC131-AC173-2N1924-2N1008	2S42
AC139	G	P	2A	AC122-AC153-AC125-AC117-AC151-AC128-AC180	
AC141	G	N	2A	AM72-AC175-AC176-AC181-SFT377-2N647-AC141	
AC142	G	P	2A	AM74-AC117-AC128-AC173-AC153-2N217-AC180	
AC150	G	P	4	AC125-AC126-AC151-AC163-2N2429-2N2613-AC107-AC150-OC30611-AC191-AC161	2SB439-2SB73
AC151	G	P	2A	AC125-AC126-AC173-2N238-2N2429-AC122-OC304-AC192	2SB439
AC152	G	P	2A	AC128-AC131-AC132-AC184-2N238-2N1924-2N2431-AC193	2SB415-2SB101-2SB156
AC153	G	P	2A	AC117-AC124-AC128-2N467-2N2431-AC193-AC180	2SB415-2SB370
AC153k	G	P	3	AC117-AC128K-AC180K-2N4106-AC193	2SB415
AC154	G	P	2A	AC1521-AC131-OC309-AC128-AC152-2N1924-AC193	
AC155	G	P	2A	AC122-AC151-AC125-OC304T-2N1190-AC192-2N2613	
AC156	G	P	2A	AC122-OC304-AC125-AC151-AC192-2N1196-2N2613	
AC157	G	N	2A	AC127-AC181-AC175-AC186-AC194-AC185	
AC160	G	P	4	AC151-AC161-OC306-AC191	2SB73
AC161	G	P	4	AC151-AC160-OC307-AC125r-OC306-AC191-SFT337	
AC162	G	P	2A	AC126-AC125-AC170-AC128-AC173-2N37-2N2429-2N1191-2N2613-AC192	2SB219-2SB459
AC163	G	P	2A	AC128-AC171-AC173-2N506-2N2429-2N2907-AC126-AC192-2N2613-2N1190	2SB219-2SB459-2SB56
AC165	G	P	2A	AC122-AC151-AC125-AC222-BC261-AC192-2N1191-2N2613	
AC166	G	P	2A	AC128-AC152-AC131-2N1189-2N4106-AC193-AC184	
AC167	G	P	2A	AC128-AC131-AC152-2N1189-2N4106-AC184	
AC168	G	N	2A	AC127-AC175-AC179-AC186-AC194-AC185	
AC169	G	P	2A	AC122-AC125-AC151	
AC170	G	P	4	AC162-AC126-AC173-AC125-OC309-AC170-2N1191-SFT353-2N2613	2SB54-2SB57-2SB77A-2SB459
AC171	G	P	4	AC173-AC163-AC126-2N1190-AC192-2N2613	2SB439

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AC172	G	N	2A	AC127-AC163-AC181	2SB460
AC173	G	P	4	AC128-AC132-AC131-AC173-AC152-2N1189-AC193	
AC174	G	P	4	AC128-AC131/30-AC153-MJ2060-AC193-AC180	
AC175	G	N	3	AC127-AC181-AC187-MJ2060-2N2707-AC176-AC194	
AC176	G	N	2A	AC181-AC186-AC187-AC175-AC194	
AC177	G	P	2A	AC152-AC131-ASY80-AC173-AC132-AC193	
AC178	G	P	3	AC180-AC122-AC153-AC128-AC117-AC193	2SB370
AC179	G	N	3	AC176-AC187-AC180-AC175-AC194-AC181	
AC180	G	P	4	AC153-AC31/30-AC128-2N4106-2N1185-AC117-AC193	
AC181	G	N	4	AC176-AC186-AC127-TLS80-AC175-AC194-AC181	
AC182	G	P	2A	AC183-AC184-AC128-AC131-AC193	
AC183	G	N	2A	AC184-AC127-AC126-AC194	
AC184	G	P	4	AC128-AC152-AC131-AC153-MJ2060-2N4106-AC193	
AC185	G	N	4	AC176-AC186-AC127-AC194	
AC186	G	N	4	AC185-AC176-AC187	
AC187	G	N	2A	AC175-2N2707-AC176-AC186-AC194-AC185	
AC188	G	P	2A	AC193-AC153-AC188-AC117	2SB370
AC191	G	P	2A	AC151-AC125-AC150-AC191-2N2613-AC161	Pilot BE
AC192	G	P	2A	AC151-AC170-AC125-AC162-2N2614-SFT353	AD BE
AC193	G	P	2A	AC153-AC188-AC117-AC128-AC193-AC180	Am. SF 1000 m
AC194	G	N	2A	AC176-AC181-AC186-AC187-AC175-AC194	11 11 1000 m
ACY16	G	P	3	ASY14-ACY33V-AC128k-2N526-AC153-AC193-AC180	2SB415-2SB370
ACY17	G	P	6	2N2207	
ACY18	G	P	6	ACY17	
ACY19	G	P	6	AC153-AC117-AC128-2N106-2N249	2S56
ACY20	G	P	6	AC153-AC131/30-AC128	
ACY21	G	P	6	ACY20	

ACY22

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
ACY22	G	P	6	ACY33	
ACY23	G	P	2A	AC122-AC125-ASY80-OC71-2N37-2N526	2SB219
ACY24	G	P	3	ASY23-ASY14-ASY48-2N138-2N1924-ASY77-ACY24-ASY12	2SB421
ACY27	G	P	32A	ACY23-AC151-AC122-AC125-2N525-2N2447-ASY26	2S13
ACY28	G	P	32A	ACY23-AC122-ASY28-AC151-2N526	
ACY29	G	P	32A	AC160-ACY27-ACY32-2N237	
ACY30	G	P	32A	AC122-AC153-AC131-2N237-2N526-AC128	
ACY32	G	P	2A	AC122-AC125-AC150-ASY80-2N506-2N527	2SB219
ACY33	G	P	2A	AC123-AC128-ASY14-2N613-2N618	2SA204
ACY34	G	P	2A	AC122-ACY23-ACY22-ASY14-AC125	
ACY35	G	P	2A	AC122-AC125-ACY23-ASY14	
ACY36	G	P	2A	AC122-ACY23V-ASY14	
ACY38	G	P	8	AC125-AC160-ACY32-AC151-AC160	
ACY39	G	P	6		
ACY40	G	P	6	ACY18	
ACY41	G	P	6	ACY40	
ACY44	G	P	6	ACY19-2N4106	2S56
ACZ10	G	P	6	AC153-AC153V-ASY12-ACY24-ASY48-AC128-2N4106-2N467	2SB222
AD103	G	P	12	AD133-ADZ11-SFT265-2N1146	
AD104	G	P	12	ADZ12-AUY21-SFT266-2N1146	
AD105	G	P	12	ADZ12-AU103-AUY22-2N1146	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AD130	G	P	12	AD149-AD153-AD129-TI3029-2N3615	2SB426-2S425
AD131	G	P	12	ASZ16-AUY33-AD149-2N2065-TI3029-2N3615	2SB425-2SB471
AD132	G	P	12	ASZ18-AUY32-ASZ15-2N2065-OC28-AD138-TI3030-2N2870-2N3615	2SB424
AD136	G	P	15	AD138-AD160-ADZ11-ASZ18	
AD138	G	P	12	AD148-AD133-ASZ17-ADZ11-ASZ18-ASZ16-2N561-2N1022A	2SB425 2SB151
AD139	G	P	11	AD149-AD148-AD150-AD162-AD262	2SB368
AD140	G	P	12	AD149-2N2836-2N1022	2SB425-2SB472
AD142	G	P	12	AM92-AD133-AD149-AD138-SFT240-ADZ11-2N301A	
AD143	G	P	12	AM91-AD150-OC26-2N301-2N2869-ADZ11	
AD145	G	P	12	AD133-AD138-ASZ16	
AD146	G	P	12	AD166	
AD148	G	P	11	AC138-AD139-OC28-OC36-2N456	2SB426
AD149	G	P	12	AD166-2N1022-2N3615	2SB426
AD150	G	P	12	AC138-AD149-AD150-OC36-2N456-TI156-2N2836	2SB425
AD152	G	P	11	AD149-AD156-AD162-2N2836-TI156	2SB472
AD153	G	P	12	AD138-AD149-AD141-TI156-MP2060-2N2870	2SB426
AD155	G	P	11	AD156-AD155-AD162-AD262	2SB367
AD156	G	P	11	AD152-AD148-AD139-AD262	
AD157	G	P	11	AD162-AD161-AD165	
AD159	G	P	15	AD136-AD136IV-ASZ17	
AD160	G	P	15	AD136-AD136IV-ASZ16	
AD161	G	N	11	AD165	2SB426
AD162	G	P	11	AD262-AD152	2SB367
AD163	G	P	12	ASZ18-AUY32-ASZ15-AD142	2SB424
AD164	G	P	11	AD162	2SB367
AD165	G	N	11	AD161	
AD166	G	P	12	AD149-AL103-2N2148	

AD167

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AD167	G	P	12	AD149-AL102-2N2147	
AD169	G	P	11	AD162-AD152-AD263	2SB368
AD262	G	P	11	AD162-AD139-AD148	
AD263	G	P	11	ASZ17	
ADY22	G	P	12	AD138-ADY29-AUY29-AUY22-ADZ11-ADZ12-2N3617-2N2870	
ADY23	G	P	12	ADZ12-AD138-AUY22-AUY32-2N3617-2N2870	
ADY24	G	P	12	ADZ12-AD138-AUY22-AUY32-2N3617-2N2870	
ADY25	G	P	12	ADZ12-AUY22-AUY28	
ADY26	G	P	26		
ADY27	G	P	12	AD149-ADY22-2N2870	
ADY28	G	P	12	ASZ15-AUY22	
ADZ11	G	P	26	AD103-AD133-AUY21-2N1146-ADZ11	2SB332
ADZ12	G	P	26	AD104-AD105-AUY22-2N1146	2SB333
AF101	G	P	1	AF131-AF127-AF185-AFY15-AF188-AF106-2N799	2S36
AF102	G	P	10	AF106-AF190-AF122-AF178-2N2494-2N2495	
AF105	G	P	1	AF137-AF126-AF185-AF190-AF197-2N344	2SA155
AF106	G	P	5	AM13-AF190-AF178-AF186-AF121-GMO761	2SA230
AF107	G	P	6	AFY10-AFY11-AF190-AFY19-AF109-GMO760	2SA432
AF108	G	P	6	AFY10-AFY11-AF190-AFY19-AF109	
AF109	G	P	5	AF180-AF190	2SA432
AF110	G	P	5	AF181-AF190	
AF111	G	P	2A	AF127-AF137-AF185-2N641-2N4034-AF197	2SA155
AF112	G	P	2A	AF125-AF126-AF136-2N1110-2N4034	2SA156

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AF113	G	P	2A	AF125-AF135-AF178-2N346-2N2495	2SA116
AF114	G	P	10	AF130-AF124-AF134-AF194-AF135-2N346-2N2495	2SA116
AF115	G	P	10	AF135-AF125-AF136-AF185-2N1110	2SA156
AF116	G	P	10	AF132-AF126-AF137-AF136-AF185-2N641	2SA155
AF117	G	P	10	AF127-AF136-AF133-SFT354-AF137-2N642	2SA76
AF118	G	P	10	2N2207-SFT162	2SA155
AF119	G	P	10	AF127-OC45-AF185	
AF120	G	P	10	AF126-AF185-OC44	
AF121	G	P	5A	AF102-AF201-AF106-AF178-2N2495-2N3588	
AF122	G	P	4	AF102-AF106-AF178-2N2495	
AF124	G	P	5A	AF134-AF194-AF135-AF178-2N346-2N4035-2N2495	2SA433-2SA156
AF125	G	P	5A	AF135-AF136-AF185-2N991-2N1110	2SA433-2SA235
AF126	G	P	5A	AF132-SET316-AF136-AF137-2N641	2SA433-2SA240
AF127	G	P	5A	AF133-AF137-AF185-2N642-2N4034-2N993	2S3433-2SA240
AF128	G	P	7	ASY27	
AF129	G	P	5A	AF121-AF124-AF134-2N1141-2N3279	
AF130	G	P	5A	AF124-AF134-AF178-2N346-2N4035-2N2495	2S3116
AF131	G	P	5A	AF135-AF125-AF136-AF134-AF185-2N1110	2SA156
AF132	G	P	5A	AF126-AF136-AF138-2N641	2SA155
AF133	G	P	5A	AF117-AF127-AF137-2N641-2N4034	2SA155
AF134	G	P	5	AF129-AF124-AF130-AF136-2N346-2N4035-2N2495	2SA116-2SA76
AF135	G	P	5	AF125-AF131-AF136-2N1110-AF168-2N3324	2SA156-2SA235-2SA76
AF136	G	P	5	AF125-AF126-AF131-2N1110-2N4034-AF166-2N3323	2SA156-2SA76
AF137	G	P	5	AF127-AF126-AF133-SFT316-2N642	2SA433-2SA155
AF138	G	P	5	AF127-AF126-AF132-AF179-2N641-2N4034	2SA155
AF139	G	P	5	AF186-AF239-AM18-M9031-2N2244-MM139	
AF142	G	P	10	AF112-AF194-AF124-AF134-2N4035	

AF143

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AF143	G	P	10	AF124-AF125-AF135-AF131-2N3324-AF195	
AF144	G	P	10	AF124-AF132-AF136-AF126-AF137-2N3323-AF196	
AF146	G	P	10	AF125-AF127-AF135-2N3324-AF195	
AF147	G	P	10	AF126-AF127-AF133-AF136-AF196	
AF148	G	P	10	AF126-AF136-AF127-AF137-2N4034-2N3323-AF197	
AF149	G	P	10	AF126-AF137-AF131-AF136-2N3324-AF196	
AF150	G	P	10	AF126-AF127-AF137-2N4034-2N3323-AF196	
AF156	G	P	10	AF127	
AF164	G	P	2B	AF114-AF134-AF124-AF194-AF132-2N1177-2N4035	
AF165	G	P	2B	AF124-AF135-AF125-AF134-2N1178-2N1179	
AF166	G	P	2B	AM11-AF126-AF116-AF136-SFT316-2N1180-2N4034	
AF168	G	P	2B	AF126-AF125-AF127-AF135-AF136-2N2083-2N1183	
AF169	G	P	2B	AF126-AF127-AF129-AF137-AF136-2N1631-2N4034-2N1632	
AF170	G	P	2B	AM14-AF137-AF127-AF136-2N1635-2N4034-2N1639-2N1426	
AF171	G	P	2B	AF126-AF133-AF136-2N4035-2N1425	
AF172	G	P	2B	AF117-AF137-AM12-AF127-2N1633-2N4034-2N1638	2SA432
AF178	G	P	7	AF106-GMO761-2N2495	2SA433
AF179	G	P	7	AF180-2N2654	
AF180	G	P	7	AF109-AF133-AF109R-2N3074	
AF181	G	P	7	AF110-AF200-AF121-2N3075	
AF182	G	P	2B	AF121-AF178-SFT163	
AF185	G	P	7	AF106-AF121-GMO762-2N2496	
AF186	G	P	7	AF139-AF239-GMO290-2N2244-2N5043	2SA257
AF187	G	P	2A	AF133-AF121-AF201-AFY15-2N5044-2N2244	
AF188	G	P	2A	AF121-AF133-AFY15-2N5044	
AF189	G	P	2A	AF133-AFY15-AF139-AF121	
AF190	G	P	2A	AF133-AF188-AFY15-AF124-AF121	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AF191	G	P	2A	SFT308	
AF192	G	P	2A	AC130	
AF193	G	P	2A	AF127-AF126-AF132-AF136-AF137-AF121-2N3323-2N4034	
AF194	G	P	2B	AF125-AF124-AF134-AF135-2N3323-2N4035	
AF195	G	P	2B	AF125-AF133-AF135-2N3323	
AF196	G	P	2B	AF125-AF126-AF136-2N3323-2N4034	
AF197	G	P	2B	AF127-AF133-AF137-2N3323-2N4034-2N3323-2N4034-2N3325	
AF198	G	P	2B	AF127-AF133-AF138-2N3325	
AF200	G	P	5A	AF181-AF121	2SA240-2SA239
AF201	G	P	5A	AF121	2SA240-2SA239
AF202	G	P	5A	AF121-AF202S-AF121S	2SA240-2SA239
AF239	G	P	5	AF254	
AF240	G	P	5	AF280-AF239-AF139-AF267	
AF250	G	P	5	AF280-AF267-AF239S	
AF251	G	P	20B	AF239-AF239S	
AF252	G	P	20B	AF240-AF239	
AF253	G	P	20B	AF139-AF109	
AF254	G	P	20B	AF202-AF239	
AF256	G	P	20	AF106	
AF267	G	P	17	AF239-AF240-AF279	
AF269	G	P	17	AF280-AF239-AF240	
AF279	G	P	17	AF239-AF179-AF267	
AF280	G	P	17	AF257-AF239S-AF240	
AFY10	G	P	6A	AFY11-AFY19-AF106	
AFY11	G	P	6A	AFY19-AF121-AF106-AFY10	2SA431
AFY12	G	P	5	AFY121-AFZ12-AF106	2SA431
AFY13	G	P	5	AF124-AF134-ASY27-AFY14	

AFY14

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AFY14	G	P	3	SFT316-ASY27	2SA72
AFY15	G	P	4	AF133-SET314-AF136-AF126-AF125-AF131-AF168-AF195	2SA52-2SA15
AFY16	G	P	5	M9031-AF239	
AFY18	G	P	6A	AF240-AF139	
AFY19	G	P	6A	AFY10-AFY11-AFY18	
AFY25	G	P		AFY34-AF126	
AFY26	G	P		AFY34	
AFY29	G	P	5	AF133-SET317-AF126-AF137-AF132-AF166-2N3323	2SA239
AFY37	G	P	5	AFY40-AF239	
AFY39	G	P	5A	AFY40-AF239	
AFY40	G	P	5	AF239-AFY37	
AFY42	G	P	5	AF239-AFY240	
AFZ10	G	P	1	AFY14-AFY19	
AFZ11	G	P	5A	AFZ12	
AFZ12	G	P	5A	AF102-AFY12-AF106	
AL100	G	P	12	AU101-2N1906-AU105-AU103-2N1906	
AL101	G	P	12	AU102-2N1905	
AL102	G	P	12	AM114-AD167-2N2147-2N2148	
AL103	G	P	12	AM111-AD166-2N2148	
ALZ10	G	P	33	AUY10	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AM11	G	P		AF126-AF116-SFT316-2N1180	
AM12	G	P		AF117-AF127-AF172-2N1524-2N1638	
AM13	G	P		AF106-AF114-AF124-2N1177	
AM14	G	P		AF117-AF127-AF170-2N1526-2N1639	
AM15	G	P		AF115-AF125-AF165-2N1178-2N1179	
AM16	G	P		AF125-AF168-2N2083	
AM18	G	P		AF139-MM139	
AM51	G	P		AC126-AC137-AC191-2N2613	
AM52	G	P		AC134-OC71-2N406-2N215	
AM53	G	P		AC126-AC161-AC192-2N217-2N2614	
AM54	G	P		AC138-OC75-AC151-TA2063	
AM71	G	P		AC128-AC139-40253	
AM72	G	N		AC127-AC141-SFT377-2N647	
AM73	G	P		AC125-AC132-AC136-2N109-2N591	
AM74	G	P		AC128-AC142-AC153-2N217	
AM91	G	P		AD143-AD150-OC26-2N301-2N2869	
AM92	G	P		SFT239-AD142-AD149-2N301A-2N2870	
AM94	G	P		AD145-OC16-40254	
AM111	G	P		AD166-AL103-2N2148	
AM114	G	P		AD167-AL102-2N2147	
AM251	S	N		BC107-BC147-BC167-BCY56	
AM252	S	N		BC108-BC148-BCY57-BC168	
AM253	S	N		BC109-BC149-BCY57-BC169	
AM254	S	N		BC267	
AM255	S	N		BC268	
AM256	S	N		BC269	
AM257	S	N		BC270	

AM258

TIPO	G = GERMANIO S = SILICIO	PNP P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AM258	S	N		BC271	
AM259	S	N		BC272	
AM260	S	P		BC297	
AM261	S	N		BCY58-BFY44	
AM262	S	N		BCY59	
AM263	S	N		BC300	
AM264	S	N		BC301	
AM276	S	N		BC303	
AM291	S	N		BDX10-2N3055	
AM293	S	N		BD141	
AM294	S	N		BD142	
ASY12	G	P	18	AC152-AC153-ASY23-2N59-2N1924-AC128-AC124-ASY80-ASY12	2SB222
ASY13	G	P	18	ASY23-ASY48-ASY24-ASY77-ASY13-2N284-2N1926	2SB89
ASY14	G	P	18	ASY23-ASY14-ASY48IV-ASY77-2N284	2SB89-2SB18
ASY16					
ASY23	G	P	6A	ASY13-ASY14-ASY48-2N272-ASY26-ACY24	2SB33
ASY24	G	P	4	ASY27-ASY56-ASY23-ASY76-ASY80	
ASY26	G	P	6A	ASY24-ASY48-ASY56-2N799	2SA155
ASY27	G	P	6A	ASY30-ASY48-ASY58-2N36	2SB101
ASY28	G	N	6A	ASY73	
ASY29	G	N	6A	ASY74-2N211-2SA22	2SA255
ASY30	G	P	3	ASY27-ASY80-ASY32-ASY61	2SB101
ASY31	G	P	1	ASY26-AC163-ASY48-ACY15-ASY56-AF125-2N506	2SB219

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
ASY32	G	P	1	ASY27-AC122-ASY48-AFY15-ASY56-AFY32-2N506	2SB219
ASY48	G	P	2A	ASY23-ASY48-ASY77-ACY24-ASY81-2N241-2N2906A-2N2906	2SB89
ASY50	G	P	32	ASY48-AC122-ASY70-AC131-2N526	
ASY52	G	P	32	ASY48-2N1926	
ASY53	G	N	32	ASY70-AC131-AC128-2N526	
ASY54	G	P	32	ASY26-ASY27-ASY48-2N1303	
ASY55	G	P	32	ASY27-TF49-2N1303	
ASY56	G	P	32	ASY26-TF49-2N1303	
ASY57	G	P	32	AS126-ASY27-TF49-2N1305-2N1303	
ASY58	G	P	32	ASY27-TF49-2N1307-2N1305	
ASY59	G	P	32	ASY27-TF49-2N1307	
ASY61	G	N	32	ASY28-ASY27-2N1302	
ASY62	G	N	32	ASY29	
ASY63	G	P	32	ASY70	
ASY70	G	P	2A	AC119-ASY80-AC124-ASY80-OC74-2N404-2N467	2SB222-2SB89
ASY73	G	N	6A	ASY74	
ASY74	G	N	6A	ASY75	
ASY75	G	N	6A	AC153-ASY75	2SC91
ASY76	G	P	6A	ASY48-ACY16-2N526	
ASY77	G	P	6A	ACY24-ASY48-ASY81-2N526-ASY77	
ASY80	G	P	6A	ACY24-ASY48-2N527	
ASY81	G	P	6A	ACY24-ASY77	
ASZ10	G	P	1	AFY19-ASY30	
ASZ11	G	P	12	ASY31	
ASZ12	G	P	12	ASY32	
ASZ15	G	P	12	AD132-AUY22-AUY28	2SB424-2SB341
ASZ16	G	P	12	AD150-AD138-AUY21-ASZ16-AUZ11-AUY28	2SB425-2SB339

ASZ17

TIPO	G S = GERMANIO = SILICIO	P N = PNP = NPN	ZOC-COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
ASZ17	G	P	12	AD150-AD138-AUY21-ASZ17-AUZ11	2SB425-2SB339
ASZ18	G	P	12	AUY21-ASZ18-AUY22-AUY28-ASZ17-AUY28	2SB424-2SB430
ASZ20	G	P	10	ASY80	
ASZ21	G	P	4	ASZ20-ASY80	
ASZ23	G	P	10	ACY24-ASY24-ASZ23	
ASZ30	G	P	1	ASY24-ASY26-2N1925	
AT605	G	N	12		
AU101	G	P	12	AU103-AUY22-AU105-AU110-MP939	
AU102	G	P	12	AUY22	
AU103	G	P	12	AU105-AU110-MP939	2SB468
AU105	G	P	12	AU103-ASZ15	
AU106	G	P	12	AU112	
AU108	G	P	12	ASZ15	
AU110	G	P	12	AUY38	
AUY10	G	P	12	ALZ10-2N4033	
AUY18	G	P	15	AD148-ASZ15-AUY35-AUY36	
AUY19	G	P	12	ASZ16-AD138-AUY33-OC28-2N157A-2N1044-ASZ15	2SB250-2SB338
AUY20	G	P	12	AUY32-AD132-OC36-ASZ15-2N157A-ASZ18	2SB87-2SB341
AUY21	G	P	13	ASZ16-AUY19-ASZ18-ASZ15-AUY28-2N352-AU103	2SB86-2SB339
AUY22	G	P	13	ASZ15-AUY20-ASZ16-OC36-2N174-2N561	2SB87-2SB341
AUY28	G	P	12	AUY22-ASZ15-AUY30-AUY28	2SB340
AUY29	G	P	13	ASZ16-AUY29-ADZ11	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
AUY30	G	P	12	ASZ16-ASZ15-AUY22-AUY28	
AUY31	G	P	12	ASZ18-ASZ16-AUY21-AUY28	
AUY32	G	P	12	ASZ18-ASZ15-AUY20-AUY28	
AUY33	G	P	12	AD149-ASZ16-AUY19-AUY28	
AUY34	G	P	12	ASZ18-ASZ15	
AUY35	G	P	15	AUY30-ASZ16	
AUY36	G	P	15	AUY38-AUY35-AUY18-AS216	
AUY37	G	P	12	AUY34-AUY30-AU105-AS215	
AUY38	G	P	12	ASZ15-AU105-AU103	
AUZ11	G	P	33	AD150-ASZ16-ASZ17	
BC100	S	N	7	BD115-BC127-BCY49A-BF259-BF338	
BC107	S	N	4	AM251-BC207-BC147-BC317-BC167-2N3568-2N2921 BC237-BC171-BC182-MPS6566	2SC458-2SC281
BC108	S	N	4	AM252-BC208-BC148-BC318-BC168-MPS6520 BC238-BC172-BC183	2SC281
BC108B	S	N	4	BSY80-BC183B-BC148B-BC168B-BC238B-BC172B- MPS6520	2SC458
BC109	S	N	4	AM253-BC209-BC149-BC319-BC169-MPS6521-BC239- BC173-BC184-MPS6521	2SC587A
BC109B	S	N	4	BC184B-MPS6521-2SC458-BC149B-BC169C-BC239B- BC173B-BC184B-MPS6521	2SC587A
BC109C	S	N	4	BC184C-BC149C-BC169C-BC239C-BC173	2SC587A
BC110	S	N	4	BF177-BC174-2N3701-BSW39	2SC856
BC112	S	N	19F	BC146-BC122-BC246-BC183	
BC113	S	N	4	BC172-BC238B-BC183-BC172B-BC238-MPS6520-2N3568- BC148-BC168-BC183B	2SC458
BC114	S	N	4	BC173-BC239B-BC184-BC238B-BC239-BC184B-MPS6521- 2N3568	
BC115	S	N	8	BC107-BC182-BC237A-MPS6566-2N3568-BC183	2SC984
BC116	S	P	8	BC177-BC212-BC261-MPS6534-2N2904-BC307-BC117- 2N5041-2N5448	2SA565
BC117	S	N	8	BF178-BC141-2N5831-BF297-BC145	

BC118

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC118	S	N	4	BC171-BC237A-BC182-BC129-BC237-2N4401-2N3568-BC147-BC167-MPS6566	2SC458
BC119	S	N	6A	BC119-BC140-2N2218-2N2243-SX3704	
BC120	S	N	6A	BC108-BC140-BC286-2N2218-2N3036-2N3665-2N2243-SX3704-MM3725	
BC121	S	N	25	BC146-BC107-BC183-BFY87A	
BC122g	S	N	25	BC146-BC107-BC183-BFY87A	
BC123	S	N	25	BC107A-BC183-BC112	
BC125	S	N	8	BC107-BC107A-BC182-BC337-MPS6566	
BC126	S	P	8	BC212-BC338-BC261-BC307-2N4402-2N5041-2N3638A-2N5447-SX3702-BC177	
BC127	S	N	21	BC146-BC184-BC198	
BC128	S	N	21	BC122-BC146-BC198	
BC129	S	N	4	BC107-BC317-BC182-BC207-MPS6566-2N2222-BC147-BC167	2SC281
BC130	S	N	4	BC108-BC318-BC183-BC208-MPS6520-2N2222-BC148-BC168-BC238	2SC281
BC131	S	N	4	BC108B-BC209-BC109-BC319-BC184-MPS6521-2N2222-BC149-BC169-BC239	2SC587A
BC132	S	N	4	BC238A-BC108B-BC183B-2N3565-BC184A-BC148-BC168-BC238	2SC458
BC134	S	N	4	BC237B-BC107B-BC182B-BC182-BC147-BC167	2SC458
BC135	S	N	4	BC107-BC182-BC118-MPS6566-2N3568-BC237A-BC107A-BC182B-BC147-BC167-BC237	2SC458
BC136	S	N	8	BC182-BC237A-BC237-BC140-BC125-BC171-MPS6566	
BC137	S	P	8	BC160-BC116-BC327-MM3726-2N1132-2N5448	
BC138	S	N	6A	SBC119-BC160-2N2219-BC140-MM3725	
BC139	S	P	6A	BC160-BC140-MM3726-2N1132-2N5855-2N2904	
BC140	S	N	6A	BSY46-BC286-2N2218A-2N3036-2N2243	2SC708
BC141	S	N	6A	BC310-2N3020-2N3036-2N2243	
BC142	S	N	6A	BC141-BC286-2N3020-2N2219A-2N3036-2N2219-2N2243	
BC143	S	P	6A	BC160-BC287-BSY46-MM3726-2N1132-2N2904A-BC161	2SA537
BC144	S	N	6A	BC286-BFY50-BC140-BSY44-2N2218A	2SC708A
BC145	S	N	8	BC117-BF117-BF178-BC141-BF297	
BC146	S	N	21	BCW83	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCULO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC147	S	N	20	BC171-BC317-BC182-BC207-MPS6566-BC167-BC237-BC107	2SC281
BC148	S	N	20	BC172-BC318-BC183-BC208-MPS6520-2N3568-BC108-BC168-BC238	2SC281
BC149	S	N	20	BC173-BC319-BC184-BC209-MPS6521-BC109-BC169-BC239	2SC258
BC150	S	N	21	BC108-BC148-BC168-MPS6520-BC172	2SC458
BC151	S	N	21	BC108-BC148-BC168-MPS6520-BC172	2SC458
BC152	S	N	21	BC107-BC147-BC167-BC171-MPS6520	
BC153	S	P	4	BC157-BC307A-BC212-BC251-MPS6516-2N5041	
BC154	S	P	4	BC158-BC307A-BC213-BC252-MPS6522-BC214	
BC155	S	N	19B	BC183-BC121-BC146	
BC156	S	N	19B	BC183-BC121-BC146-BC156	
BC157	S	P	20	BC212-BC320-BC251-BC204-MPS6516-2N5041-BC177-BC257-BC307	2SA565
BC158	S	P	20	BC213-BC321-BC252-BC205-MPS6522-BC178-BC258-BC308-BC262	2SA565
BC159	S	P	20	BC214-BC322-BC253-BC206-MPS6523-BC179-BC259-BC309-BC263	2SA565
BC160	S	P	6A	BC287-2N1132-2N2904-MM3726-BC361-BC304-2N4037	2SA537
BC161	S	P	6A	BC311-2N4037-2N2904-BC303	2SA537A
BC167	S	N	21	BC171-BC317-BC182-BC237-BC207-MPS6566-2N5448-BC107-BC147-BC167	2SC458
BC167B	S	N	21	BC171B-BC182-MPS6566-2N5448-BC107B-BC147B-BC167B	
BC168	S	N	21	BC172-BC318-BC183-BC208-MPS6520-2N5447-BC108-BC148-BC168-BC238	2SC458
BC169	S	N	21	BC173-BC319-BC184-BC239-BC209-MPS6521-2N5447-BC109-BC149-BC169	2SC587
BC170	S	N	21A	BC208-BC238-BC318-BC148-BC168-BC172-BC183-BC108	2SC458-2SC281A
BC171	S	N	21A	BC182-BC317-BC237-BC207-MPS6566-2N2921-BC182B-BC107-BC147-BC167	2SC458-2SC281
BC172	S	N	21A	BC183-BC318-BC238-BC208-MPS6520-BC183C-BC108-BC148-BC168	2SC458
BC173	S	N	21A	BC184-BC319-BC239-BC209-MPS6521-BC183C-BC109-BC149-BC169	2SC458
BC174	S	N	21A	BC110-BCY65-BC182-BC182B	2SC856
BC175	S	N	21A	2N3704	
BC177	S	P	4A	BC261-BC320-BC212-BC216-BC204-MPS6517-BC157-BC257-BC307	2SA565
BC178	S	P	4A	BC213-BC231-BC262-BC205-MPS6518-BC158-BC258-BC308-MPS6522	2SA565

BC179

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCULO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC179	S	P	4A	BC214-BC322-BC263-BC206-MPS6519-BC159-BC259-BC309	
BC180	S	N		2N3704-BC337-BC232	
BC181	S	P	21A	BC308-BC157-BC307VI-BC251-BC177-BC204-BC257-BC307	
BC182	S	N	21A	BC171-BC317-BC237-BC174-BC207-BC182-MPS6566-BC107-BC147-BC167	
BC183	S	N	21A	BC172-BC318-BC238-BC237A-BC208-MPS6520-BC107-BC147-BC167	
BC184	S	N	21A	BC139-BC239-BC237-MPS6521-BC173-BC209-BC109-BC149-BC169	
BC185	S	N	6A	BC140-BC181-BC177-BC261-2N2219-2N2217-2N2218-BC301	2SC708
BC186	S	P	4A	BC107A-BC261-BC177-BC281-BC178-BC182-BC157-BC257-MPS6516	2SA565
BC187	S	P	4A	BC177-BC261-BC178A-BC181-BC179-BC158-BC258	2SA565
BC190	S	N	4A	8CY65-BC174-BC182	
BC192	S	P	4A	2N2907-SX3702-BC328-BC231	
BC194	S	N	19B	2N5447-BC337-2N2222	
BC196	S	P	19B	BC202-BC200	
BC197	S	N	19B	BC207-BC317-BC237-BC182-BC107-BC147-BC167-MPS6566	
BC197A	S	N	19B	BC123-BC171-BC147-BC107-BC182-BC207	
BC198	S	N	19B	BC208-BC318-BC146-BC183-BC108-BC108-BC148-BC168-BC238-MPS6520	
BC199	S	N	19B	BC146G-BC184-BC109-BC149-BC169-BC239-BC173-MPS6521	
BC199B	S	N	19B	BC209-BC149-BC319-BC109-BC122-BC173	
BC200	S	P	21B	BC206-BC322-BC202-BC196	
BC201	S	P	25	BC200-BC239-BC109-BC168-BC196	2SA565
BC202	S	P	25	BC200G-BC239-BC108-BC238-BC196	2SA565
BC203	S	P	25	BC200G-BC107-BC237-BC196	2SA565
BC204	S	P	4	BC212-BC177-BC251-BC307-MPS6517-BC157-BC257-MPS6516	2SA564A
BC205	S	P	4	BC213-BC178-BC308-MPS6518-BC252-BC158-BC258-MPS6522	2SA564
BC206	S	P	4	BC214-BC179-BC253-BC309-MPS6519-BC213-BC159-BC259-MPS6523	
BC207	S	P	4	BC147-BC171-BC107-BC182-BC167-BC237-MPS6566	2SC458
BC208	S	N	4	BC148-BC172-BC108-BC183-BC168-BC238-MPS6520	2SC458

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC209	S	N	4	BC149-BC173-BC109-BC184-BC169-BC238-MPS6521	2SC587A
BC210	S	N	4A	2N2222-BC337	
BC211	S	N	6A	BC140-2N3020-2N2218A-2N3036-2N2219-2N2243	2SC708
BC212	S	P	21A	BC204-BC157-BC230-BC177-BC307-BC251-BC257-MPS6516	
BC213	S	P	21A	BC205-BC157-BC231-BC177-BC307-BC204-BC257-MPS6522	
BC214	S	P	21A	BC206-BC159-BC322-BC179-BC307-BC253-BC259-BC309-MPS6523	
BC215	S	P	4A	BC237-BC231-BC149-BC261-BC157-2N22906-MPS6534	2SA565
BC216	S	P	4A	BC107-BC327-2N2906-BC231	
BC217	S	P	4A	BC107	
BC218	S	N	4A	BC108-BC148-BC168-MPS6520-BC208	2SC458
BC219	S	N	6A	2N4360-2N3820-BC140-BC341-BC302-2N2218	2SC708
BC220	S	N	4	BC113-BC237A-BC183-BC138B-BC148-BC168-BC238-MPS6520-BC208	2SC458
BC221	S	P	8	BC328-2N3638A-2N5447-BC327-2N2907-BC231	
BC222	S	N	8	BC125-BC338-2N5449-BC223-BC337-2N2222	
BC223	S	N	21A	BC337-BC207-BC130-BC107-BC147-2N3704-2N5449-2N2218	2SC708
BC224	S	P	21	BC308-BC213-BC258B-BC205-BC158-BC162-BC178-BC258-MPS6522-BC153	2SA564
BC225	S	P	4	BC307A-BC212-BC157-BC177-BC257-MPS6516	2SA564A
BC226	S	N	6	BC337-2N2222	
BC231	S	P	21	BC327-BC137-BC257A-BC161-BC179-FPS6535-2N2907	
BC232	S	N	21	BC167-BC207-BC130-BC107-BC147-BC337-2N2222	
BC234	S	N	4A	BC107A-BC147A-BC167A-MPS6566	2SC458
BC235	S	N	4A	BC107B-BC147A-BC167B-MPS6566	2SC458
BC236	S	N	4		
BC237	S	N	20B	BC182-BC171-BC207-BC317-MPS6566-2N5448-BC107	2SC458
BC238	S	N	20B	BC172-BC318-BC183-BC208-MPS6520-2N5447-BC108	2SC458
BC239	S	N	20B	BC173-BC319-BC184-BC209-MPS6521-2N5447-BC109	2SC587A
BC240	S	P	21	2N4058	

BC241

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC241	S	P	21	2N4059	
BC242	S	P	21	2N4060	
BC243	S	P	21	2N4061	
BC244	S	P	21	2N4062	
BC245	S	N	21	2N3707	
BC246	S	N	21	2N3708	
BC247	S	N	21	2N3709	
BC248*	S	N	21	2N3710	
BC249	S	N	21	2N3711	
BC250	S	P	21A	BC205-BC308-BC231-BC177-BC307-MPS6516-BC117	2SA56A
BC252	S	P	21A	BC205-BC158-BC213-BC308-BC178-BC258	
BC253	S	P	21A	BC206-BC159-BC322-BC179-BC309-BC214-BC213	2SA565
BC254	S	N	21	BC307-BC147-BC108-BC207-BC130-BC107-BC110	2SC856
BC255	S	N	21	BC337-BC147-BC108B-BC107-BC130-BF178-BFY43	
BC256	S	P	21A	2N4250A-2N5447-BC266-BC212	
BC257	S	P	21	BC231-BC307-BC251-BC204-BC177-MPS6517-BC212	2SA565
BC258	S	P	21	BC178-BC308-BC231-BC205-BC252-MPS6518-BC213	2SA565
BC259	S	P	21	BC179-BC206-BC253-BC309-MPS6519-BC214	
BC260	S	P	4	2N3964-2N2906-BC158-BC178-MPS6516	2SA564
BC261	S	P	4	BC177-BC212-BC157-BC204-BC153-2N3964-2N2906	2SA564
BC262	S	P	4	BC178-BC205-BC158-BC213-2N3964-2N2906	2SA564
BC263	S	P	4	BC179-BC214-BC159-BC206-BC153-2N3964-2N2906	
BC264	S	N	21A	(FET)-2N3821-2N3823-BFS70-72	
BC266	S	P	4	2N3962-2N3965-2N2907-BC212	
BC267	S	N	4	BC207-BC317-2N956-BC140-BC337-2N2218	2SC708
BC268	S	N	4	BC208-BC318-BC338-BF248SN3-2N730-BC140	2SC708
BC269	S	N	4	BC209-BC319-BC109-BF248SN4-2N731-BC140	2SC708

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC270	S	N	4	BC283-BC338-BF248SN2-2N730-BC140	2SC708
BC271	S	N	4	BC283-BC338-BF248SN3-2N2222-BC271	
BC272	S	N	4	BC337-2N2222	
BC280	S	N	4	2N930-BC107-BC414	2SC587
BC281	S	P	4	2N3964-BC212-BC416	
BC282	S	N	4	2N2222-BC337-2N2907-BC231	
BC283	S	P	4	2N2906-BC213-BC327-2N2222	
BC284	S	N	4	2N915-BC107-BC147-BC167-BC237	2SC458
BC285	S	N	4	BF336-2N3114-BF257-BF120-BF118	
BC286	S	N	6A	BC141/16-TF286-2N2243-BC301	2SC708A
BC287	S	P	6A	BC161/10-BC160-BC303	2SA537A
BC288	S	N	6A	BFX34-BC141-BC301-BC288	2SC708A
BC289	S	N	4	BC107-BC147-BC167-BC237-BC171-MPS6566	
BC290	S	N	4	BC414-2N930-BC184-BC280-2N930	2SC587A
BC291	S	P	4	BC157-BC177-BC257-BC307-BC261	2SA564A
BC292	S	P	4	BC416-BC214	
BC293	S	N	6A	BC323	
BC294	S	P	6A	BC161-BC361-BC303-2N4036-BC313	2SA537A
BC295	S	N	4	BC107-BC147-BC167-BC237-BC171-BC183	2SC458
BC297	S	P	4	BC160-2N1132-MM3726-2N4037	2SA537
BC298	S	P	4	BC160-2N1132-MM3726-2N4037	2SA537
BC300	S	N	6A	2N1893-2N3019-2N2243-BC141-2N3036-2N3020	
BC301	S	N	6A	BC286-BC141-2N2218-2N3036-2N3020-2N2102	2SC708A
BC302	S	N	6A	BC140-2N3109-2N2217-2N2218-2N3020	2SC708
BC303	S	P	6A	BC287-2N4036-2N2904-BC161	2SA537A
BC304	S	P	6A	BC287-BC160/6-2N2904-2N1132-MM3726	2SA537
BC307	S	P	21A	BC177-BC212-BC251-MPS6517-BC204-BC320-2N2904	2SA564A

BC308

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC308	S	P	21A	BC178-BC205-BC213-BC321-BC252-MPS6518-2N2904	2SA564
BC309	S	P	21A	BC179-BC206-BC214-BC322-BC253-BC178-MPS6519-2N2904	
BC310	S	N	6A	BC286-BC141-BC341-BC301-2N3020	2SC708A
BC311	S	P	6A	BC287-BC161-BC361-BC303-2N4036	
BC312	S	N	6A	2N1893	
BC313	S	P	6A	BC161-BC303-2N4036	2SA537
BC314	S	N	4	BF120-BF297-BF236-BC285	
BC315	S	P	21A	BC415A-2N5087-BC159-BC179-BC253-BC263-BC214-MPS6523-BC206	
BC317	S	N	21A	BC107-BC147-BC167-BC237-BC171-BC182-BC207	
BC318	S	N	21A	BC107-BC147-BC167-BC239-BC237-BC171	2SC458
BC319	S	N	21A	BC109-BC149-BC169-BC239-BC173-BC184-BC209	2SC587A
BC320	S	P	21E	BC327-BC307-BC251-BC212-BC204	2SA564A
BC321	S	P	21E	BC307-BC251-BC213-BC204	2SA564A
BC322	S	P	21E	BC309-BC253-BC214-BC206	
BC323	S	N	6A	BC293-BC288	
BC324	S	N	6A	BC141-BC341-BC301-2N3020-BC211	2SC708A
BC325	S	P	5A	BC256-BC266-BC212	
BC326	S	P	5A	BC256-BC266-BC212-BC325	
BC327	S	P	21A	BC160-BC303-BC297-2N2907	
BC328	S	P	21A	BC160-BC303-BC298-2N2907	
BC329	S	N	21A	2N5210-BC114-BC414-2N930A-BC382-BC290	2SC587A
BC330	S	N	21A	BC414-2N930-BC382-BC290	2SC587A
BC331	S	N	21A	BC110-BC174-BC190-BC182	2SC856
BC332	S	N	21A	BC107-BC147-BC167	
BC333	S	N	21A	BC108-BC148-BC168-BC238-BC172-BC183	2SC458
BC334	S	P	21A	BC158-BC178-BC258-BC308-BC252-BC213-BC205	2SA564
BC335	S	N	21A	BC109-BC149-BC169-BC239-BC173-BC184	2SC587

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC336	S	P	21A	BC159-BC179-BC259-BC309-BC253-BC214-BC206	
BC337	S	N	21A	2N2222A-BC140-BC301	
BC338	S	N	21A	BC140-BC301	
BC340	S	N	6A	2N3109-2N3110-BC140-2N2218-2N3036-BC302-2N3020	2SC708
BC341	S	N	6A	2N3107-2N3108-BC140-2N2218-2N3036-BC301-2N3020	2SC708
BC342	S	N	6A	BC140-BC341-2N3036-BC302-BC211	2SC708A
BC343	S	P	6A	BC160-BC361-BC304-BC313	2SA537A
BC344	S	N	6A	BC141-BC301-BC211-BC142	2SC708A
BC345	S	P	6A	BC161-BC303-BC313	2SA537A
BC347	S	N	21E	BC107-BC147-BC167-BC237-BC171-BC182-BC207	
BC348	S	N	21E	BC107-BC147-BC167-BC237-BC171-BC183-BC207	
BC349	S	N	21E	BC108-BC148-BC168-BC238-BC172-BC183	2SC458
BC350	S	P	21E	BC157-BC177-BC257-BC307-BC261-BC204-BC212	2SA564A
BC351	S	P	21E	BC157-BC177-BC257-BC307-BC251-BC261-BC213-BC204	2SA564A
BC352	S	P	21E	BC158-BC178-BC258-BC308-BC252-BC262-BC213-BC205	2SA564
BC354	S	P	21E	BC158-BC178-BC258-BC308-BC252-BC262-BC213-BC205	2SA564
BC355	S	P	21E	BC158-BC178-BC258-BC308-BC252-BC262-BC213-BC205	2SA564
BC357	S	P	21E	BC158-BC178-BC258-BC308-BC252-BC262-BC213-BC205	2SA564
BC358	S	N	21E	BC108-BC148-BC168-BC238-BC172-BC183	2SC458
BC360	S	P	6A	BC160-2N5022-2N5023-2N1132-BC304-MM3726-2N4037-BC313-BC143	2SA537
BC361	S	P	6A	BC161-BC157-2N4030-2N4031-BC160-2N1132-BC303	2SA537A
BC362	S	P	34	BD136	
BC363	S	P	34	BD138	
BC364	S	P	34	BD140	
BC365	S	N	34	BD135	
BC366	S	N	34	BD137	
BC367	S	N	34	BD139	

BC370

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC370	S	P	4	BC160-2N1132-MM3726-2N4037-BC143	2SA537
BC377	S	N	4	BC140-2N2218-2N3036-2N3020-BC144	2SC708
BC378	S	N	4	BC140-2N2218-2N3036-2N3020-BC144	2SC708
BC381	S	P	21A	BC177-BC261	
BC382	S	N	21A	BC107-BC147-BC167-BC237-BC171-MPS6566-BC113	
BC383	S	N	21A	BC413B-BC413C-BC337-BC108-BC148-BC168-BC238-BC172-BC183-MPS6520	
BC384	S	N	21A	BC413B-BC237-BC109-BC149-BC169-BC239-BC173-BC184-MPS6521	
BC385	S	N	21A	BC237-BC107-BC147-BC167-BC171-MPS6566-BC113	
BC386	S	N	21A	BC238-BC385-BC108-BC148-BC168-BC172-BC183-MPS6520-BC114	
BC387	S	N	21E	BC337-2N2222	
BC388	S	P	21E	BC327-2N2906	
BC394	S	N	4	BF257-BF118	
BC395	S	N	8	BC140-BC341-BC300-2N3020-BC211	2SC708A
BC396	S	P	8	BC161-BC303-BC313	2SA537A
BC397	S	P	6A		
BC398	S	N	6A		
BC399	S	N	6A		
BC400	S	P	4	BC256-BC255	
BC404	S	P	21A	BC477	
BC405	S	P	21A	BC256-BC212-BC477	
BC406	S	P	21A	BC214-BC478	
BC407	S	N	4	BC107-BC147-BC167-BC237-BC171-BC182	
BC408	S	N	4	BC108-BC148-BC168-BC238-BC172-BC183	
BC409	S	N	4	BC109-BC149-BC169-BC239-B173-BC184	
BC411	S	N	8	BC141-BC301-2N3020-BC211-BC144	2SC708A
BC412	S	N	21A	BC141-BC341-BC301-2N3020-B211-BC144	2SC708
BC413	S	N	21A	BC384	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC414	S	N	21A	BC384	
BC415	S	P	21A	BC214	
BC416	S	P	21A	BC214-BC479	
BC417	S	P	4	BC157-BC177-BC257-BC204-BC307-BC251-BC261	2SA565
BC418	S	P	4	BC158-BC178-BC258-BC205-BC308-BC252-BC261	2SA565
BC419	S	P	4	BC159-BC179-BC259-BC206-BC309-BC253-BC263	
BC420	S	P	4		
BC429	S	N	29	BD137-BC366	
BC430	S	P	29	BD138-BC363	
BC440	S	N	4	BC140	
BC441	S	N	4	BC141	
BC460	S	P	4	BC160	
BC461	S	P	4	BC161	
BC477	S	P	4		
BC478	S	P	4	BC214	
BC479	S	P	4	BC416-BC214	
BC507	S	N	21A	BC174-BC182	
BC508	S	N	21A	BC174-BC182	
BC509	S	N	21A	BC414-BC184	
BC510	S	N	21A	BC413-BC184	
BC512	S	P	21A	BC157-BC177-BC257-BC307-BC261-BC251-BC204	
BC513	S	P	21A	BC158-BC178-BC258-BC308-BC252-BC262-BC351-BC205	
BC514	S	P	21A		
BC516	S	P	21A		
BC517	S	N	21A		
BC582	S	N	21A	BC107-BC147-BC167-BC237-BC171-MPS6566-BC207	2SC458
BC583	S	N	21A	BC108-BC148-BC168-BC238-BC172-MPS6520-BC208	

BC584

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BC584	S	N	21A	BC109-BC149-BC169-BC239-BC173-MPS6521-BC209	
BCW10	S	N	21E		
BCW11	S	P	21E		
BCW12	S	N	21E		
BCW13	S	P	21E		
BCW14	S	N	21E		
BCW15	S	P	21E		
BCW16	S	N	21E		
BCW17	S	P	21E		
BCW18	S	N	21E		
BCW19	S	P	21E		
BCW20	S	N	21E		
BCW21	S	P	21E		
BCW22	S	N	21E		
BCW23	S	P	21E		
BCW24	S	N	4A		
BCW25	S	N	36		
BCW26	S	N	36		
BCW29	S	P	35		
BCW30	S	P	35		
BCW31	S	N	35		
BCW32	S	N	35		
BCW33	S	N	35		
BCW34	S	N	4A		
BCW35	S	P	4A		
BCW36	S	N	21		
BCW37	S	P	21		

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BCW38	S	N	21B		
BCW39	S	N	21B		
BCW44	S	N	6A		
BCW45	S	P	6A		
BCW46	S	N	20B	SE4020	
BCW47	S	N	20B	BC207-BC317-BC147	
BCW48	S	N	20B	BC208-BC318-BC148	
BCW49	S	N	20B	BC209-BC319-BC149	
BCW50	S	N	4		
BCW51	S	N	21A		
BCW52	S	P	21A		
BCW56	S	P	20B	2N4249	
BCW57	S	P	20B	BC204-BC320-BC157	
BCW58	S	P	20B	BC205-BC321-BC158	
BCW59	S	P	20B	BC206-BC322-BC159	
BCW60	S	N	35		
BCW61	S	P	35		
BCW62	S	P	39D		
BCW63	S	P	39D		
BCW64	S	P	39D		
BCW82	S	N	39D		
BCW83	S	N	39D		
BCW84	S	N	39D		
BCW85	S	P	21A	2N907A	
BCW86	S	P	21A	BC177	
BCX10	S	P			
BCX40	S	N	6A		

BCX60

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BCX60	S	P	6A		
BCY10	S	P	18A		
BCY11	S	P	18A		
BCY12	S	P	18A	BC160-2N1132	
BCY13	S	N	16	2N2219	
BCY14	S	N	16	BFY13-2N2219	
BCY15	S	N	16	BFY14-2N2219	
BCY16	S	N	16	BFY14-BSY18-2N2219	
BCY17	S	P	8	BCY12-BCY34	
BCY18	S	P	8	BCY12-BCZ11-BCY34-OC468	
BCY19	S	P	8	BCY11-BCY31-BCZ12-OC445	
BCY20	S	P	8	BCY30	
BCY27	S	P	8	BCY31-BCZ10-OC443	
BCY28	S	P	8	BCY31-BCZ11-OC467	2S301
BCY29	S	P	8	BCY30-BCZ12-OC449	2S321
BCY30	S	P	8	BCY29-BCW56A	
BCY31	S	P	8	BCY27-BCY28-BCW56A	
BCY32	S	P	8		
BCY33	S	P	8		
BCY34	S	P	8	BCY17-BCZ10-BCY78VII-BCY27-BC177-BC261	
BCY38	S	P	6A		
BCY39	S	P	6A	BC161-BC160-2N2904A-2N2904	
BCY40	S	P	6A		
BCY42	S	N	4A	BCY58-BC107	
BCY43	S	N	4A	BCY58-BCY59	
BCY49	S		8		
BCY50	S	N	6A	BC108A-BC183B-BC183-MPS6520	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BCY51	S	N	6A	BC107-BC182B-BC108C-BC107B-BC183-MPS6520	
BCY54	S	P	6A		
BCY55	S	N	2X-4	2N2060B-2SC280	2SC280
BCY56	S	N	4	FT107D-SE4021-BCY59	
BCY57	S	N	4	BCY58-BC107A-BC182A-FT107A-2N3568-SE4022-2N2921	2SC648
BCY58	S	N	4	AN261-BCY58-BC107B-BC182B-BFY44-BCY38-MPS6566-FT107A-SE4022-2N3568	2SC907
BCY59	S	N	4	AM262-BCY59-BC107B-BC182B-MPS6566-FT107B-SE4021	2SC907
BCY65	S	N	4	BC107B-2N2483-SE4020-FT107C-TN2484	2SC248
BCY66	S	N	4	BC107-BCY59-BC107B-FT107B-SE4021-2N2484	2SC648
BCY67	S	P	4	BCY71-FT107B-SE4021-2N3799	
BCY70	S	P	4	BCY79-BC212-BC177-BC204-BC261-BC216-2N3964	2SA549
BCY71	S	P	4	2N3964-BCY79	2SA549A
BCY72	S	P	4	2N3964-BCY78	2SA549A
BCY77	S	P	4		
BCY78	S	P	4		2SA548
BCY79	S	P	4	2N3964	2SA548
BCY85	S	N	21A		
BCY86	S	N	21A	2N915	
BCY87	S	N	36B		2SC280
BCY88	S	N	36B		2SC280
BCY89	S	N	36B		2SC280
BCY90	S	P	4		
BCY90B	S	P	8		
BCY91	S	P	4		
BCY91B	S	P	8		
BCY92	S	P	4		
BCY92B	S	P	8		

BCY93					
TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BCY93	S	P	4		
BCY93B	S	P	8		
BCY94	S	P	4		
BCY94B	S	P	8		
BCY95	S	P	4		
BCY95B	S	P	8		
BCY96	S	P	4		
BCY96B	S	P	8		
BCY97	S	P	4		
BCY97B	S	P	8		
BCZ10	S	P	18A	BCY17-BC177-BCY27-BC261-BCY34-BC212-BC178-BC213-MPS6522	
BCZ11	S	P	18A	BCY18-BC261-BCY28-BC212-BC177-BC204-BC178-BC213-MPS6522	
BCZ12	S	P	18A	BCY19-BCY29-BCY31-BC177-MPS6522	
BCZ13	S	P	22	BCY27-BC178-BC233-BC261-BCY33-BC213-MPS6522	
BCZ14	S	P	22	BC234-BC261-BCY28-BC213-BC178-BC205-MPS6522	
BD106	S	N	11	BD109-BDY34-BD124-2N3054-BCY47-2N3054-MT3101	2SC830
BD107	S	N	11	2N4911-2N4912-BD109-BDY13-BD124-TIP31A	2SC830
BD109	S	N	11	BDY39-BD107-BDY34-BD124-2N3054-TIP31A-MJ2249	2SC830
BD111	S	N	12	BDY39-BD107-BDY34-BDY72-2N3054-BD130-2N3055	2SC681A

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BD112	S	N	12	BDY39-BD145	2SC1030-2SC830
BD113	S	N	12	BDY39-BD145	2SC1030
BD115	S	N	6A	SBF258-BF115-BF179C-BD127-BF337-BF118-BF258	2SC1546
BD116	S	N	12	BDY13-BD117-BD127-TM291-BD145-2N3055-BD130	
BD117	S	N	12	BDY39-BD127-AM291-2N3055-BD130-BD123	2SC1030
BD118	S	N	12	BD130-AM291-BD127-BD145-2N3055	
BD119	S	N	11	BU111-BD127	
BD120	S	N	11	BU110	
BD121	S	N	12	BD130-BD111-AM291-2N3055	
BD123	S	N	12	BD130-AM291-2N3055	
BD124	S	N	11	BDY13-BD107-2N3054-2N3055-BD109-NJ2249	
BD127	S	N	29	BU111-BD232-BD410-BD158-2N5415	
BD128	S	N	29	BU111-BD232-BD410-2N5416-BD158	
BD129	S	N	29	BU111-BD232-BD410-BD159-2N5416	
BD130	S	N	12	AM291-BDK10-2N3055	2SC1030
BD131	S	N	29	BD233-BD243-BD585	
BD132	S	P	29	BD234-BD244-BD586	
BD135	S	N	29	SDA345-BD137-BD233-BD266-TIP29-BD165	
BD136	S	P	29	SDA445-BD234-BD227-TIP30-BD166	
BD137	S	N	29	SDA345-DB235-BD228-TIP29A-BD167	
BD138	S	P	29	SOB445-BD236-BD229-TIP30A-BD168	
BD139	S	N	29	SD345-BD237-BD230-TIP29B-DB169	
BD140	S	P	29	SD445-BD238-BD231-TIP30B-BD170	
BD141	S	N	12	2N4347-2N442-2N3442-2N5038-BDY56	
BD142	S	N	12	AN291-BDX10-2N3055-BD130-BD182	
BD144	S	N	12	BU106-BU100-BU116	
BD145	S	N	12	BU110-BU106-BU116-BU100	

BD148

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BD148	S	N	11	BDY16-BDY78-BD163	
BD149	S	N	11	BDY78	
BD150	S	P	29	BD232-BD127-BD140-BD157-BF292C	
BD151	S	P	29	BD136-BD234-BD227-TIP30-BD166	
BD152	S	P	29	BD138-BD256-BD229-TIP30A-BD168	
BD153	S	N	29	BD139-BD237-BD230-TIP29B-BD169	
BD154	S	N	29	BD135-BD233-BD226-TIP29-BD165	
BD155	S	N	29	BD137-BD235-BD228-TIP29A-BD167	
BD156	S	P	29	BD140-BD238-BD231-TIP30B-BD170	
BD157	S	N	29	BD410	
BD158	S	N	29	BD410	
BD159	S	N	29	BD410	
BD160	S	N	12		
BD161	S	N	11	BD149-TIP31B-2N3054-BDY78	
BD162	S	N	11	2N4910-BD109-BD148-BD124-BD106-TIP31-MJ3101-BDY78	
BD163	S	N	11	2N4910-BD109-BD149-BD124-BD107-TIP31A-2N3054-BDY78	
BD165	S	N	29	BD135-BD233-BD226-TIP29	
BD166	S	P	29	BD136-BD234-BD227-TIP30	
BD167	S	N	29	BD137-BD235-BD228-TIP29A	
BD168	S	P	29	BD138-BD236-BD229-TIP30A	
BD169	S	N	29	BD139-BD237-BD230-TIP29B	
BD170	S	P	29	BD140-BD238-BD231-TIP30P	
BD171	S	N	29	BD400-BD157	
DB172	S	N	29	BD410-BD157	
BD173	S	N	29	BD410-BD157	
BD175	S	N	29	BD437-BD241	
BD176	S	P	29	BD438-BD242	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BD177	S	N	29	BD439-BD241A	
BD178	S	P	29	BD440-BD242A	
BD179	S	N	29	BD441-BD241B	
BD180	S	P	29	BD442-BD242B	
BD181	S	N	12	BD130-2N3055-BD142	
BD182	S	N	12	BD130-BD141-2N3055	
BD183	S	N	12	BD130-BD141-2N3055	
BD185	S	N	29	BD497-BD243	
BD186	S	P	29	BD438-BD244	
BD187	S	N	29	BD439-BD243A	
BD188	S	P	29	BD440-BD244A	
BD189	S	N	29	BD441-BD243B	
BD190	S	P	29	BD442-BD244B	
BD191	S	N	11		
BD192	S	N	11	BD605	
BD193	S	N	11		
BD195	S	N	29	BD205-BD243	
BD196	S	P	29	BD206-BD244	
BD197	S	N	29	BD205-BD243A	
BD198	S	P	29	BD206-BD244A	
BD199	S	N	29	BD207-BD243B	
BD200	S	P	29	BD208-BD244B	
BD201	S	N	29	BD213/60-BD245A-BD597	
BD202	S	P	29	BD214/60-BD246A-BD598	
BD203	S	N	29	BD213/60-BD245A-BD597	
BD204	S	P	29	BD214/60-BD246A-BD598	
BD205	S	N	29	BD245A	

BD206

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BD206	S	P	29	BD246A	
BD207	S	N	29	BD245B	
BD208	S	P	29	BD246B	
BD215	S	N	11	BD158	
BD216	S	N	11	BD158	
BD226	S	N	29	BD233-BD241	
BD227	S	P	29	BD234-BD242	
BD228	S	N	29	BD235-BD241A	
BD229	S	P	29	BD236-BD242A	
BD230	S	N	29	BD237-BD241C	
BD231	S	P	29	BD238-BD242C	
BD232	S	N	29	BD410-BD159	
BD233	S	N	29	BD243-BD175	
BD234	S	P	29	BD244-BD176	
BD235	S	N	29	BD243A-BD177	
BD236	S	P	29	BD244A-BD178	
BD237	S	N	29	BD243B-BD179	
BD238	S	P	29	BD244A-BD180	
BD239	S	N	28	BD233	
BD240	S	P	28	BD234	
BD241	S	N	28	BD233-BD585	
BD242	S	P	28	BD234-BD586	
BD243	S	N	28	BD201-BD595	
BD244	S	P	28	BD202-BD596	
BD245	S	N	30	BD213/45-BD605	
BD246	S	P	30	BD214/45-BD606	
BD249	S	N	30		

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BD250	S	P	30		
BD306	S	N	29	BD233-BD175-BD243	
BD307	S	N	29	BD235-BD177-BD243A	
BD400	S	N	29	BD232-BD157	
BD410	S	N	29	BD232-BD159-MJE340	
BD433	S	N	29	BD185-BD243	
BD434	S	P	29	BD186-BD244	
BD435	S	N	29	BD185-BD243	
BD436	S	P	29	BD186-BD244	
BD437	S	N	29	BD187-BD243	
BD438	S	P	29	BD188-BD244	
BD461	S	N	29	BD435-BD185	
BD462	S	P	29	BD436-BD186	
BD463	S	N	29	BD437-BD187	
BD464	S	P	29	BD438-BD188	
BD466	S	P	29		
BD477	S	N	29		
BD575	S	N	29	BD233-BD185-BD241	
BD576	S	P	29	BD234-BD186-BD242	
BD577	S	N	29	BD235-BD187-BD241A	
BD578	S	P	29	BD236-BD188-BD242A	
BD579	S	N	29	BD237-BD189-BD241B	
BD580	S	P	29	BD238-BD190-BD242B	
BD581	S	N	29	BD239-BD241C	
BD582	S	P	29	BD238-BD242C	
BD585	S	N	29	BD201-BD205-BD243	
BD586	S	P	29	BD202-BD206-BD244	

BD587

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BD587	S	N	29	BD203-BD205-BD243A	
BD588	S	P	29	BD204-BD206-BD244A	
BD589	S	N	29	BD207-BD243B	
BD590	S	P	29	BD208-BD244B	
BD591	S	N	29	BD243C	
BD592	S	P	29	BD244C	
BD595	S	N	29	BD201-BD213/45-BD245	
BD596	S	P	29	BD202-BD214/45-BD246	
BD597	S	N	29	BD203-BD213/60-BD245A	
BD598	S	P	29	BD204-BD214/60-BD246A	
BD599	S	N	29	BD213/80-BD245B	
BD600	S	P	29	BD214/80-BD246B	
BD601	S	N	29	BD245C	
BD602	S	P	29	BD246C	
BD605	S	N	29	BD201-BD205-BD245	
BD606	S	P	29	BD202-BD206-BD246	
BD607	S	N	29	BD203-BD205-BD245A	
BD608	S	P	29	BD204-BD206-BD246A	
BD609	S	N	29	BD207-BD245B	
BD610	S	P	29	BD208-BD246B	
BD675	S	N	29		
BD676	S	P	29		
BD677	S	N	29		
BD678	S	P	29		
BD679	S	N	29		
BD680	S	P	29		
BD695	S	N	29		

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOCCHO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BD696	S	P	29		
BD697	S	N	29		
BD698	S	P	29		
BD699	S	N	29		
BD700	S	P	29		
BD701	S	N	29		
BD702	S	P	29		
BDX10	S	N	12	2N4910	
BDX11	S	N	12	AM291-2N3055	
BDX12	S	N	12	2N3442	
BDX13	S	N	12		
BDX22	S	N	11		
BDX23	S	N	12		
BDX24	S	N	11		
BDX40	S	N	12		
BDX41	S	N	12		
BDX50	S	N	12		
BDX51	S	N	12		
BDY10	S	N	12	BDY38-2N4907	
BDY11	S	N	12	2N4909	
BDY12	S	N	11	BD124-BLY47A-2N4910-2N3054	2SC830H
BDY13	S	N	11	BD124-2N3054-2N3050-2N3055	2SC830H
BDY15	S	N	11	BDY12-BD124-BLY47A-2N4910-2N3054	2SC830H
BDY16	S	N	11	BDY13-BD124-2N4911-2N3055-2N4912	
BDY17	S	N	12	2N3771-2N3055	
BDY18	S	N	12	BD130-2N3772-2N3055	
BDY19	S	N	12	BD130-2N3772-2N3055	

BDY20

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BDY20	S	N	12	AM291-BDX10-BD130-2N3055	
BDY23	S	N	12	BDY92-2N4914	
BDY24	S	N	12	BDY91-2N4915	
BDY25	S	N	12	2N4347-2N3442	
BDY26	S	N	12		
BDY27	S	N	12		
BDY28	S	N	12		
BDY34	S	N	29		
BDY38	S	N	12	BD130-2N4914-2N3055	2SC665H
BDY39	S	N	12	AM291-BDX10-2N3055	
BDY53	S	N	12		
BDY54	S	N	12		
BDY55	S	N	12	AM291-BDX10-2N3055	
BDY56	S	N	12	2N4347	
BDY57	S	N	12	2N5403	
BDY58	S	N	12	2N4348	
BDY60	S	N	12	BDY13	
BDY61	S	N	12	BDY13	
BDY62	S	N	12	BDY13	
BDY71	S	N	11	2N3054	
BDY72	S	N	11	2N3441	
BDY73	S	N	12	2N3715	
BDY74	S	N	12	2N4347	
BDY75	S	N	12	2N3771	
BDY76	S	N	12	2N3772	
BDY77	S	N	12		
BDY78	S	N	11	2N3054	

[illegible]

BF110

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BF110	S	N	6A	BF114-BF178-BF117-BF111-BF140-BF257-BF110	2SC154C
BF111	S	N	6A	SBF178-BD127-BD115-BF257-BF179C-BF178-BF257B	2SC154C
BF114	S	N	6A	BF108-BF178-BF115-BF257-BF117-BFY43-BF157	2SC154C
BF115	S	N	5A	BF117-BF225-SE5056-BF194-BF224-BF173-BF194	2SC445-2SC460
BF117	S	N	6A	BF178-BF257-SET001-BF110-BFY43-BF157	2SC154
BF118	S	N	6A	SBF258-BF178-BF338-BF258-BF179C-BF257-BF111	2SC154C
BF119	S	N	6A	BF337-BF178-BF257	
BF120	S	N	4	BF179-SE7055-2N5833-BF258-BF338-BF298	2SC154C
BF121	S	N	23	BF196-BF167-SE5056-BF224-BF225-BF261	2SC454
BF123	S	N	23	BF197-BF237-BF173-BF196-SE5030B-BF384	2SC464
BF125	S	N	23	BF197-BF237-BF173-BF314-SE5031-BF224	2SC460
BF127	S	N	23	BF167-BF196-SE5056-BF224	2SC682
BF130	S	N		BC107A-BFY39	
BF131	S	N		BFY39	
BF132	S	N		BCY58-BFY37	
BF133	S	N	4	BSX48-BFY37	
BF134	S	N	4	BFX62-BF173-BF115-BF311-BF224-BF306-BF371	
BF136	S	N	4	BFX60-BF167-BF185-BF195-BF225-BF261-BF302	
BF137	S	N	6A	BF194-BF115-BF173-BF257-BF336-BF119	2SC154B
BF138	S	N	4	BFX60-BF167-BF136-BF185-BF195-BF261-BF225	
BF140	S	N	6A	BF114-BF178-BFY43-2N257-BF257-BF117	2SC154B
BF140D	S	N	6A	BF178-BF179B-BF118-BF174	2SC154C
BF152	S	N	4	BF183-BFX62-BF224-BF371	2SC462
BF153	S	N	4	BF255-BF194-BF185-BF121-BF254-2N5363-BF224	2SC462
BF154	S	N	8	BC172A-BF196-BC183A-BF185-BC238A-BF255-MPS8565 BC108A-2N3564-BF224	2SC458
BF155	S	N	5	BF180-BFX62-2N4134-BF225-BF357-BF161	2SC707
BF156	S	N	6A	BF117-BF257-BF140-BFY43-BF178-SE7002-2N4134-BF110	2SC154A

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BF157	S	N	6A	BF170-BF179-BF173-BF178-SBF257-BF179A-BF257	2SC154C
BF158	S	N	4	BF173-BF199-BF237-2N3563-40478-BF224-BF115	2SC460-2SC462
BF159	S	N	4	BF173-BF199-BF237-40478-BF224-BF232-BF371	2SC464
BF160	S	N	4	BF185-BF173-BF255-BF237-40478-BF224-BF195-BF302	2SC460
BF161	S	N	5	BF181-BFX62-BF255-2N4134-BF225-BF357-BF155	2SC707
BF162	S	N	4	BF200-BFX62-BF225-BF173-BF224	2SC463
BF163	S	N	4	BF167-BF196-BF198-BF225-BF261-BF367	2SC463
BF164	S	N	4	BF167-BF198-BF224-BF225-BF261-BF367	2SC463
BF165	S	N	8	BC182A-BC180A-BF195-BC207A-BF185-BC107A-MPS6565-2N3564-TIS94	
BF166	S	N	5	BF173-BF167-BF200-BF237-BFX62-2N4134-BF225	2SC463
BF167	S	N	5A	BF189-BF200-BF237-SE5056-BF224-BF196-BF198	2SC682
BF168	S	N		BF173-BF167-BF224-BF306-BF244-BF366	2SC464
BF169	S	N	4	BC108-BF115-BC108A-BC208A-BC183A-MPS6520-BF107B	
BF169A	S	N	4	BF115	
BF170	S	N	6A	BF173-BF178-BF110-BF117	2SC154B
BF173	S	N	5A	BF117-BF224-BF140-BF306-FT129-SE5031-BF384	2SC464
BF174	S	N	6A	BF114-SBF257-BF170-BF179A-BF178-BF179B-BF257	
BF175	S	N	4	BF167-BF225-2N4134-2N4012-TIS18-BF196-BF198	2SC682
BF176	S	N	8	BF173-BF311-SE5025-BF224-BF232-BF223-BF371-	2SC464
BF177	S	N	6A	BF108-BF179A-BF117-BFY43-BF257-SE7002-BF177	2SC856-2SC154C
BF178	S	N	6A	BF108-SBF178-BF140D-BF258-BF179A-BF118	2SC856-2SC154C
BF179	S	N	6A	BF148-SBF258-BF118-BF258-BF179B-BF179C	2SC154C
BF179B	S	N	6A	BF179C-BF118-BF258	2SC154C
BF180	S	N	5	MT1061-BF225-BF357-BF155-BF161	2SC707
BF181	S	N	5	SE3005-BF224-BF357-BF155-BF161	2SC707
BF182	S	N	5	BFX62-SE3005-2N918-BF357-BF155-BF161	2SC707
BF183	S	N	5	BFX62-SE3005-2N918-BF357-BF155-BF161	2SC707

BF184

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BF184	S	N	5A	BF115-BF167-BF234-SE5056-BF224-BF194-BF303	2SC460
BF185	S	N	5A	BF115-BF237-BF167-BF125-BF235-SE5056-40478-TIS84	2SC535
BF186	S	N	6A	SBF258-BF225-BF111-BF110-BF178-BF257	2SC154C
BF189	S	N	5A	BF115-BF224-BF173-BF167-BF184-BF224-BF261-BF367	2SC460
BF194	S	N	20A	BF115-BF173-BF163-SE5056-BF234-BF224-BF189	2SC460
BF195	S	N	20A	BF115-BF235-BF173-BF225-BF163-SE5056-BF238	2SC535
BF196	S	N	20A	BF329-BF167-BF225-SE5056-BF198-BF261-BF367	2SC682
BF197	S	N	20A	BF330-BF173-BF224-SE5030B-BF199-BF371	2SC464
BF198	S	N	20C	BF163-BF167-BF225-SE5056-BF196-BF261-BF367	2SC6782
BF199	S	N	20C	BF197-BF173-BF224-SE5030B-BF330-BF371	2SC464
BF200	S	N	5	BF162-SE5020-SE5024-BF224-2N3570	2SC466
BF206	S	N	5	BF384-2N918-BF200-BF371	2SC466
BF207	S	N	5A	BF224-BF167-BF225-BF367	2SC682
BF208	S	N	5A	BF224-BF173-BF330-BF371	2SC464
BF209	S	N	5	BF224-BF200-BF366-BF222	2SC466
BF212	S	N	5	BF384-2N918-BF180-BF357	2SC707
BF213	S	N	5	BF384-2N918-BF180-BF357	2SC707
BF214	S	N	5A	BF184-BF194-BC183-BF238-BF303-BF395	2SC460
BF215	S	N	5A	BF185-BF195-BF237-BF302-BF371-BF215-BF288	2SC461
BF216	S	N	21	BF184-BF199-BF238-BF395	2SC460
BF217	S	N	21	BF184-BF199-BF238-BF395	2SC460
BF218	S	N	21	BF184-BF199-BF238-BF395	2SC460
BF219	S	N	21	BF184-BF199-BF238-BF395	2SC460
BF220	S	N	21	BF184-BF199-BF238-BF395	2SC460
BF221	S	N	4	BF310-BF200-BF314-BF222	2SC466
BF222	S	N	5	SBF222-BFX62-BF195-BF225-BF185-BF237-BF302	2SC461
BF223	S	N	20A	BF197-BF169-BF232-BF224-SE5030B-BF384-BF173	2SC464

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BF224	S	N	21B	BF173-SE5030B-2SC682-BF232-BF223-BF306	2SC682
BF225	S	N	21B	BF167-BF196-BF224-BF225-BF163-SE5056-40487	2SC682
BF226	S	N	5A	BF185-BF195-BF237-BF302-BF371-BF288	2SC461
BF227	S	N	19A	BF173-BF224-BFR27-BF137-2N5830-BF384-BF227	2SC464
BF228	S	N	19B	BF177-BSW69-2N5830-BSW32-BSX21-BFY80	
BF229	S	N	19A	BF163-BF184-BF254-BF194-SE5056-BF238-BF303	2SC460
BF230	S	N	19A	BF163-BF185-BF255-BF195-SE5056-BF302	2SC461
BF232	S	N	5A	BF173-BF224-2N918-BF223-BF371	2SC464
BF233	S	N	4	BF254-BF237-BF184-BF194-BF238-BF303	2SC460
BF234	S	N	4	BF184-BF194-BF254-BF229-TIS86-BF238-BF303	2SC460
BF235	S	N	4	BF255-BF184-TIS88-BF185-BF195-BF237-BF302	2SC461
BF236	S	N	4	BF255-BF185-BF195-BF237-BF302-BF371	2SC461
BF237	S	N	21B	BF163-BF115-BF194-BF195-BF241-SE5056-BF185-BF302	2SC460
BF238	S	N	21B	BF163-BF115-BF195-BF194-BF240-SE5056-BF184-BF303	2SC461
BF240	S	N	20A	BF167-SE5056-BF225-TIS84-BF196-BF198	2SC682
BF241	S	N	20A	BF173-SE5030B-BF224-TIS86-BF196-BF198	2SC464
BF243	S	P	21B	2N3588-BF450-BF343	
FETBF244	S	P	21C	BF245-2N3819-MPF121	
FETBF245	S	P	21D	BF244-2N3819-MPF121	
FETBF246	S	P	21C	BF247	
FETBF247	S	P	21D	BF246	
BF248	S	N	4	BC328-2N2222	
BF249	S	P	4	BC338-2N2907	
BF250	S	N	4	BC328-2N2222	
BF251	S	N	5	BF167-SE5056-BF225-BF367	2SC682
BF252	S	N	5	BF167	2SC682
BF254	S	N	21B	BF163-BF194-SE5056-BF184-BF238-BF303	2SC460

BF255

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BF255	S	N	21B	BF163-BF195-SE5056-BF185-BF237-BF395	2SC461
FETBF256	S	P	21D		
BF257	S	N	6A	SBF257-BD115-BF336-BF118-BF380	
BF258	S	N	6A	SBF258-BF338-BF259-BF337-BF118-BF381	
BF259	S	N	6A	BF258-BF336-SE7056-BF338-BF382	
BF260	S	N	5A	BF167-BF173-BF200-SE5056-BF162	
BF261	S	N	5A	BF167-BF173-SE5056-BF225-BF367	
BF262	S	N	17A		
BF263	S	N	17A		
BF264	S	N	17A		
BF265	S	N	5A	BF180-BF357-BF161	2SC707
BF266	S	N	5	BF185-BF200-BF302	2SC460
BF267	S	N	5A	BF167-BF225-BF367	2SC682
BF268	S	N		BFY90	
BF270	S	N	5	BF167-SE5056-BF225-BF261	2SC682
BF271	S	N	5	BF173-FT129-SE5030B BF225-BF330	2SC464
BF272	S	P	5	BF316-MPSH83	
BF273	S	N	4	BF184-BF238-BF395	2SC461
BF274	S	N	4	BF185-BF237-BF394	2SC460
BF287	S	N	5	BF167-2N4134-BF184-BF238-BF395	2SC461
BF288	S	N	5	BF163-SE5056-BF185-BF237-BF394	2SC460
BF290	S	N	5	SE5031-BF200-BF260-BF366-BF162	
BF291	S	N	4	BC107-BC147-BC167-BC237-BC171-BC182	2SC458
BF292	S	N	6A	SBE178-BF258-BF337-BF118-BF381	
BF292C	S	N		SE7055-BF258-BF337-BF118	
BF293	S	N	4	BC107-BC147-BC167-BC237	2SC458
BF294	S	N	6A	BF257-BF336-BF118-BF380	

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BF297	S	N	21A	BF118-BF257-BF336-BF118-BF292	
BF298	S	N	21A	BF118-BF258-BF337-BF292	
BF299	S	N	21A	BF259-BF338-BF292	
BF302	S	N	5A	BF160-FT129-BF185-BF195-BF237-BF371-BF288	2SC461
BF303	S	N	5A	FT129-SE5031-BF185-BF195-BF237-BF371-BF288	2SC461
BF304	S	N	5A	BF173-FT129-SE5031-BF185-BF195-BF237-BF371	2SC461
BF305	S	N	6A	SBF257-BF179B-BF118-BF258-BF292	2SC154C
BF306	S	N	5A	BF173-FT129-SE5031-BF224-BF371	2SC464
BF308	S	N	5	BF180-BF357-2N3839-BF308	2SC707
BF309	S	N	5	BF180-BF357-2N3839-BF309	2SC707
BF310	S	N	20A	BF181-SE5030B-BF173	2SC856
BF311	S	N	20B	BF173-BF224-SE5030B	2SC464
BF314	S	N	20A	BF200-BF366-BF162	2SC466
BF315	S	P	4	BF324	
BF316	S	P	5	BF272-MPSH83	
BF317	S	P	4	BF324	
FETBF320	S	N	21C	2N3820-2N3909	
BF321	S	N	4	BC108-BC148-BC168-BC238	2SC458
BF322	S	N	6A	BC338-2N2218	
BF323	S	P	6A	BC328-2N2904	
BF324	S	P	21A	BF414-BF372	
BF325	S	N	21B	BF167-BF196-BF198-BF261	2SC682
BF329	S	N	20A	BF196-SE5056-BF198-BF167	2SC682
BF330	S	N	20A	BF197-SE5031-BF199-BF224-BF371-BF173	2SC464
BF332	S	N	20A	BF152-BF194-BF371	2SC460
BF333	S	N	20A	BF160-BF195-BF371	2SC461
BF334	S	N	20A	SE5056-BF314-BF384-BF369-BF194	2SC460

BF335

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BF335	S	N	20A	SE5056-BF314-BF385-BF368-BF195	2SC461
BF336	S	N	6A	BF257-BF118-BF380	
BF337	S	N	6A	BF258-BF118-BF381	
BF338	S	N	6A	BF259-BF381	
BF339	S	P	21B	BF451-BF441-MPSH54-BF542	
BF340	S	P	21B	BF451-BF441-MPSH55-BF542	
BF341	S	P	21B	BF450-BF440-MPSH55-BF541	
BF342	S	P	21B	BF450-BF440	
BF343	S	P	21B	BF451-BF441	
BF344	S	N	4B	BF184-BF371-BF234	
BF345	S	N	4B	BF184-BF395-BF235	
BF348	S	N	21D	Fet	
BF357	S	N	21A	BF377-MPSH33	
BF359	S	P			
BF360	S	P			
BF367	S	N	21F	BF167-BF225	2SC682
BF368	S	N	21E	BF195-BF335-BF385	2SC461
BF369	S	N	21E	BF194-BF334-BF384	2SC460
BF372	S	P	5		
BF373	S	N	21F	BF173-BF224	2SC464
BF380	S	N	34	BF457-BD127	
BF381	S	N	34	BF458-BD127	
BF382	S	N	34	BF459-BD127	
BF384	S	N	21B	BF194-BF334-BF384	2SC460
BF385	S	N	21B	BF195-BF335-BF595	2SC461
BF390	S	N	6A	SE7056-BF259-BF338	
BF394	S	N	21F	BF194-BF254-BF238-BF303	2SC460

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BF395	S	N	21F	BF195-BF253-BF255-BF237	2SC461
BF397	S	P	21A		
BF398	S	P	21A		
BF439	S	P	5	BF313-BF272	
BF440	S	P	21B	BF450-BF342-BF542	
BF441	S	P	21B	BF451-BF340-BF540	
BF450	S	P	21B	BF440-BF342-BF542	
BF451	S	P	21B	BF441-BF340-BF343-BF540	
BF457	S	N	29	BD115-BD127-BF456-MSE340	
BF458	S	N	29	BD115-BD127-MSE340	
BF459	S	N	29	BF338-MJE340-BD127	
BF516	S	P	5	BF316-BF439-BF516-BF372	
BF523	S	N	21B	BF173-BF224-BF371	2SC464
BF540	S	P	4B	BF450-BF440-BF340-MPSH55	
BF541	S	P	4B	BF450-BF440-BF341-MPSH55	
BF542	S	P	4B	BF451-BF441-BF342-MPSH55	
BF559	S	P			
BF560	S	P			
BF594	S	N	4B	BF194-BF254-BF238	2SC460
BF595	S	N	4B	BF195-BF255-BF237-BF302	2SC461
BFR10	S	N	6A		
BFR11	S	N	4		
BFR14	S	N	spec		
BFR15	S	N	5A		
BFR16	S	N	4		
BFR17	S	N	4		
BFR18	S	N	4		

BFR19

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFR19	S	N	6A		
BFR20	S	N	6A		
BFR21	S	N	6A		
BFR22	S	N	6A	2N2102	
BFR23	S	P	6A	2N4036	
BFR24	S	P	6A	2N4037	
BFR25	S	N	4	BSV68-2N4390	
BFR36	S	N	6A		
BFR37	S	N	5A		
BFR38	S	P	5		
BFR63	S	N	40B		
BFR64	S	N	40B		
BFS10	S	N		2N3866	
BFS11	S	N	5A		
BFS12	S	N		2N5042	
BFS13	S	N	spez		
BFS14	S	P	spez		
BFS15	S	N	spez		
BFS16	S	P	spez		
BFS17	S	N	35		
BFS18	S	N	35		
BFS19	S	N	35		
BFS20	S	N	35		
BFS21	S	N	5C	Fet	
BFS22	S	N	6A		
BFS23	S	N	6A		
BFS26	S	P	spez		

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFS27	S	N	spez		
BFS28	S	N	5H	Fet	
BFS29	S	N	spez		
BFS30	S	N	spez		
BFS31	S	N	spez		
BFS32	S	P	spez		
BFS33	S	P	spez		
BFS34	S	P	spez		
BFS36	S	N	35		
BFS37	S	P	35		
BFS38	S	N	35		
BFS39	S	N	35		
BFS40	S	P	35		
BFS41	S	P	35		
BFS42	S	N	35		
BFS43	S	N	35		
BFS44	S	P	35		
BFS45	S	P	35		
BFS46	S	N	35		
BFS47	S	N		BSX21	
BFS48	S	P		2N4031	
BFS50	S	N	6A		
BFS51	S	N	6A		
BFS52	S	P		2N2904	
BFS53	S	P		2N2905	
BFS55	S	N	5A		
BFS57	S	N	spez		

BFS58

TIPO	G = GERMANIO S = SILICIO	PNP = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFS58	S	N	spez		
BFS59	S	N	21E		
BFS60	S	N	21E		
BFS61	S	N	21E		
BFS62	S	N	5A		
BFS65	S	N	42	BFS69	
BFS69	S	P	19B		
BFS70	S	N	5C	Fet	
BFS71	S	N	5C	Fet	
BFS72	S	N	5C	Fet	
BFS73	S	N	5F	Fet	
BFS74	S	N	4C	Fet	
BFS75	S	N	4C	Fet	
BFS76	S	N	4C	Fet	
BFS77	S	N	4C	Fet	
BFS78	S	N	4C	Fet	
BFS79	S	N	4C	Fet	
BFS80	S	N	5C	Fet	
BFS85	S	N	35		
BFS86	S	N	37		
BFS87	S	N	37		
BFS88	S	N	35		
BFS89	S	N	6A	BD115	
BFS90	S	P	6A		
BFS91	S	P	6A		
BFS92	S	P	6A		
BFS93	S	P	6A		

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFS94	S	P	6A		
BFS95	S	P	6A		
BFS96	S	P	21E		
BFS97	S	P	21E		
BFS98	S	P	21E		
BFS99	S	N	4	2NS830	
BFV10	S	N	38		
BFV11	S	N	38		
BFV12	S	N	38		
BFV14	S	N	38		
BFV16	S	N	38		
BFV17	S	N	38		
BFV18	S	N	38		
BFV20	S	P	38		
BFV21	S	P	38		
BFV22	S	P	38		
BFV23	S	P	4		
BFV24	S	P	4		
BFV25	S	P	38		
BFV26	S	P	38		
BFV27	S	N	38		
BFV28	S	N	38		
BFV29	S	P	38		
BFV30	S	P	38		
BFV31	S	P	38		
BFV32	S	P	38		
BFV33	S	P	38		

BFV34

TIPO	G = GERMANIO S = SILICIO	PNP P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFV34	S	P	38		
BFV35	S	P	38		
BFV36	S	P	38		
BFV37	S	N	38		
BFV38	S	N	38		
BFV39	S	N	38		
BFV40	S	N	38		
BFV41	S	N	38		
BFV42	S	N	38		
BFV43	S	N	38		
BFV44	S	N	38		
BFV45	S	N	38		
BFV46	S	N	38		
BFV47	S	N	38		
BFV48	S	N	38		
BFV49	S	N	38		
BFV50	S	N	38		
BFV51	S	N	38		
BFV52	S	N	38		
BFV53	S	N	38		
BFV54	S	N	4		
BFV55	S	N	4		
BFV56	S	N	4		
BFV57	S	N	4		
BFV58	S	N	38		
BFV59	S	N	38		
BFV60	S	N	38		

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFV61	S	N	38		
BFV62	S	N	38		
BFV63	S	N	4		
BFV64	S	N	4		
BFV65	S	N	4		
BFV66	S	N	4		
BFV67	S	N	4		
BFV68	S	N	4		
BFV69	S	N	4		
BFV80	S	N	38		
BFV81	S	P			
BFV82	S	P			
BFV83	S	N			
BFV84	S	N			
BFV85	S	N			
BFV86	S	P			
BFV87	S	N			
BFV88	S	N			
BFV89	S	N			
BFV90	S	N	6A		
BFV99	S	N	4		
BFW10	S	N	5C	2N4416-2N3823 Fet	
BFW11	S	N	5C	2N4416-2N3823 Fet	
BFW12	S	N	21D	Fet	
BFW13	S	N	21D	Fet	
BFW16A	S	N	6A	BFY39-BFY40-2N918-2N4875	
BFW17A	S	N	6A	BFY39-2N918-2N4875	

BFW19

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFW19	S	N	4	2N3137-2N3866	
BFW20	S	P	4	2N3962	
BFW21	S	P	4	2N3963	
BFW22	S	P	4	2N3964	
BFW23	S	P	4	2N3965	
BFW24	S	N	4	2N3108-2N2243	
BFW25	S	N	4	2N3109-2N2192	
BFW26	S	N	4	2N3110-2N2193	
BFW29	S	N	8	2N2219A-2N2218A	
BFW30	S	N	5	BFY69-BFY37-2N918-MT1061A-2N2865	
BFW31	S	P	4A	2N2907	
BFW32	S	N	4A	2N2222	
BFW33	S	N	6	2N1893	
BFW34	S	N	8		
BFW35	S	N	8		
BFW36	S	N	8	2N3114	
BFW37	C	N	6	2N3114	
BFW38	S	N	8	2N2915	
BFW39	S	N	36A	2N2915	
BFW39A	S	N	36A	2N2919A-2N2915	
BFW40	S	N	36A	2N2916	
BFW40A	S	N	36A	2N2916	
BFW41	S	N	5	2N918	
BFW42	S	N	8	2N2863	
BFW43	S	P	4	2N3494	
BFW44	S	P	6A	2N3495	
BFW45	S	N	4	SE7001-BF257C	

TIPO	G = GERMANIO S = SILICIO			ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
	P = PNP N = NPN					
BFW46	S	N	6A		BSX72-2N3924-2N3553	
BFW47	S	N	6A		40478-2N3553-2N719A	
BFW51	S	N	36A		2N2974-BCY57	
BFW51A	S	N	36A		2N2978-BCY57	
BFW52	S	N	36A		2N2975-BCY57	
BFW52A	S	N	36A		2N2979-BCY57	
BFW57	S	N	20		SE6020-2N2193-2N2243	
BFW58	S	N	20		SE6020-2N2194-2N2243	
BFW59	S	N	20		SE6020-2N2192-2N2243	
BFW60	S	N	20		BC147A-SE6020-2N2192-2N2243	
BFW61	S	N	5C		2N4222-2N3821-2N3822 Fet	
BFW63	S	N	4A		FT129-TIS84	
BFW64	S	N	5A		MT1061-TIS84	
BFW66	S	N			2N2219A	
BFW67	S	N			2N5058-2N3114	
BFW68	S	N	4		2N2222A	
BFW70	S	N	5A			
BFW80	S	N	8			
BFW87	S	P	20			
BFW88	S	P	20			
BFW89	S	P	20			
BFW90	S	P	20			
BFW91	S	P	20			
BFW92	S	N	17A			
BFW96	S	N	5C		2N4416 Fet	
BFW97	S	N	21E			
BFW98	S	N	spez			

BFW99

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFW99	S	N			
BFX10	S	N	36		
BFX11	S	P	36	2N3726-2N3351	
BEX12	S	P	4	BC178-BC262-MPS6518-2N2894-BC213-BC205-2N2411	2SA548
BFX13	S	P	4	BC178-BC178-BC262-MPS6518-2N2794-2N2412	2SA548
BFX15	S	P	36	2N2060-2N3351	
BFX16	S	N	spez	2N2920	
BFX17	S	P	6A	2N3725-2N2863-BSX45-2N918-BSX73	
BFX18	S	N	5	BF173-BF225-BFX60-2N918-2N4134-TIS57	
BFX19	S	N	5	BC109-BF173-BFX60-2N918-2N4135-TIS56	
BFX20	S	N	5	BF173-BFX60-2N918-2N4135-TIS56	
BFX21	S	N	5	BF173-BFX59-2N918-2N4135-2N3570	
BFX25	S	P		2N3504	
BFX29	S	P	6A	BC161-2N2905A-BFX29-2N4405	2SA537
BFX30	S	P	6A	BC161-2N2905A-2N4403	2SA537
BFX31	S	N	5	BFX60-BC173-2N4134-TIS56-BF306-MPSH33	
BFX32	S	P		2N3251-2N3250	
BFX33	S	N	6A	BFX55-2N2218-BFW17-MPSH23	
BFX34	S	N	6A	2N3420	
BFX35	S	P	4A	2N3504	
BFX36	S	P	36A	2N4024-2N3810	
BFX37	S	P	4	2N2907A-2N3962-BSV16	
BFX38	S	P	6A	BC161-2N4032-2N2905	
BFX39	S	P	6A	2N4030-2N2905-BC161	
BFX40	S	P	6A	BC161-2N4031-2N4033-2N2905A	
BFX41	S	P	6A	BC161-2N4031-2N4030-2N2905A	
BFX43	S	N		2N2369	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFX44	S	N	4	2N2368	
BFX45	S	N	20B	BCW49-BC148-2N2222-MPS6520	2SC907
BFX47	S	N	5		
BFX48	S	P	4A	2N2905-2N4034-2N3250	
BFX49	S	N	45		
BFX50	S	N	4	2N2222A-2N720	
BFX51	S	N	4	2N2221A-2N2893	
BFX52	S	N	4	2N2222A-2N956	
BFX53	S	N		BFY90	
BFX55	S	N	6A	BFS23-2N3866	
BFX59	S	N	5	BFX89-2N918-FT129	
BFX59F	S	N	5		
BFX60	S	N	5A	BF173-BF129-TIS56	
BFX61	S	N		SFT443-2N1893	
BFX62	S	N	5	BF180-2N918	
BFX63	S	N	5E	Fet	3SK20
BFX66	S	N		2N998	
BFX67	S	N	7A	2N997	
BFX68	S	N	6A	2N1711-BC140	
BFX68A	S	N	6A	2N1711-2N1890-BC141	
BFX69	S	N	6A	2N1613-BC140	
BFX69A	S	N	6A	2N3110-2N2193-BC141	
BFX70	S	N	36	2N2060	
BFX71	S	N	36	2N2223	
BFX72	S	N	36	2N2223A	
BFX73	S	N	5	2N918	
BFX74	S	P	6A	2N1131-BC160	

BFX74A

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFX74A	S	P	6A	2N1132-BC161	
BFX75	S	N	spez		
BFX76	S	N	spez		
BFX77	S	N		BF115-BF173-2N918-2N2865	
BFX79	S	N/P	36	2N4854	
BFX80	S	N/P	36	2N4854	
BFX81	S	N/P	36	2N4855	
BFX82	S	P		2N4381-2N3330	
BFX83	S	P		2N4382-2N3330	
BFX84	S	N	6A	2N3108-2N2243-BC141	
BFX85	S	N	6A	2N3107-2N2243-BC141-BD517	
BFX86	S	N	6A	2N3109-2N2192-BC140-BD515	
BFX87	S	P	6A	2N2904A-BC161	
BFX88	S	P	6A	2N2904-BC160	2SA537
BFX89	S	N	5	2N918-MT1061-2NSC707	2SA537
BFX90	S	P	4	2N3930	2SC707
BFX91	S	P	6A	2N3931	
BFX92	S	N	4	2N929-2N2483-BCY66-BCY59-BCY50	
BFX93	S	N	4	2N930-2N2484-BCY66-BCY59	
BFX94	S	N	4	2N2221-BC140	
BFX95	S	N	4	2N2222-BC140	
BFX96	S	N	6A	2N2218-BC140	
BFX97	S	N	6A	2N2219-BC140	
BFX98	S	N	6A	2N3114	
BFX99	S	N	36	2N2060B-2N2223	
BFY10	S	N	8	BSX45-BFY55-BC107-BFX45-BFY33-2N929-2N3177-2N1565	
BFY11	S	N	8	BC107-BFY50-BFY33-BSX45-2N929-2N930-2N3177-2N1565	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFY12	S	N	6A	BCY13-BSX73-BFY10-BFY11-2N2219	2SC479
BFY13	S	N	6A	BCY14-2N2219-2N2219A	
BFY14	S	N	6A	BCY15-BF140-BFY43	
BFY15	S	N		BFY33-BSW19-BFY67-2N697-2N930-2N2219	
BFY16	S	N	6A	BFY12-2N697-2N2219	
BFY17	S	N		BFY10-BSX72-BFY12-BFY12-BFX55-2N708-2N2219-2N2218	
BFY18	S	N	4	BSX75-BCY59-BSY63-BFY87-BSY93-2N708	
BFY19	S	N	4	BSY63-BSY19-BC108-BFY33-2N708-2N930-2N730	2SC463
BFY20	S	N		BF173-2N2218-2N2640	
BFY22	S	N	19B	BC121-BC146-BFY47-BF224-BFY87-2N930	2SC475
BFY23	S	N	19B	BC121-BC146-BFY47-BF224-BFY87-2N930	2SC476
BFY24	S	N	19B	BC121-BC146-BFY47-BFY87-2N930-2N918	2SC476
BFY25	S	N		BSY34-BFY28	
BFY26	S	N		BSY63-2N708	
BFY27	S	N	4	BFY28-BF167-2N915-2N2222A-2N2221A-2N918	
BFY28	S	N		BSY34-2N2221	
BFY29	S	N	19F	BFY49r-BC146r-BC123-2N930	
BFY30	S	N	19F	BFY49r-BC146r-BC130-2N930	
BFY33	S	N	6A	BSY92-BFX33-BSX95-BSX46-2N613-2N697	2SC479
BFY34	S	N	6A	BSY44-BSY95-BSX45-2N1613	2SC479
BFY37	S	N	4	BSY70-BC108A-BSY93-BSX48-BSY95A-BC107-2N2222-2N2218	2SC907
BFY39	S	N	4	BC107-BFY27-BC182-BSY39-2N930-MPS6565	2SC284
BFY40	S	N	6A	BFY34-BSY44-BSX44-BC140-BSY92-BF178-2N1613-2N1313-2N2218	2SC708
BFY41	S	N	6A	BF111-BF140-BSY45-BF258-2N1893-2N698-2N22218A	2SC708A
BFY42	S	N		BC107-2N697	
BFY43	S	N	6A	BF110-BSW68-BF114-BF178-BF140-BF258-2N3114	2SC154C
BFY44	S	N	6A	BFY12-SFT443-2N3725	

BFY45

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BFY45	S	N	6A	BFY65-BSW66-BF178-2N1990-SE7002-2N1893	2SC857
BFY46	S	N	6A	BSY71-BSX96-BSX45-2N1711	2SC479
BFY47	S	N		BC121	
BFY48	S	N		BC122-2N930	
BFY49	S	N		2N930	
BFY50	S	N	6A	BSX46-BSY46-BSY85-2N2193-2N4047-2N3253-2N2222	2SC708
BFY51	S	N	6A	BSY45-BSY46-BSY85-2N2193-2N4046-2N3252-2N3053	2SC708
BFY52	S	N	6A	BSX45-BSY46-BFY56-2N3252-2N2219-2N3724-2N3053	2SC708
BFY53	S	N	6A	BSX46-BSY46	
BFY55	S	N	6A	BSY46-2N3253-2N2297-2N2193A-BSX45	2SC708
BFY56	S	N	6A	BSX46-BSX61-BFY50-BSY83-2N2297-2N3110-2N2193-2N3252	
BFY56A	S	N	6A	BSW65-2N3108	
BFY57	S	N	6A	BF110-BF140-BF117-SE7002-2N3114	
BFY63	S	N	6A	2N3137-BSY71-BFX55	
BFY64	S	P	6A	2N2905-BSV16	
BFY65	S	N	6A	BFY80-BSY56-BF177-BC141-2N1990-2N3036-2N1893	2SC154
BFY66	S	N	5A	BFX62-BF180-2N918-BFX73	
BFY67	S	N	6A	BSY44-BSY52-2N1613-BFX45	2SC708A
BFY68	S	N	6A	2N1711-BSY71-BFX45	
BFY68A	S	N	6A	2N2219	
BFY69	S	N	19B	BC146-BC122-2N706A	
BFY70	S	N	6A	SFT43-2N3724-BC150-BSX73-2N1613	
BFY72	S	N	6A	2N2218-2N2219-BSY34-BFY65	
BFY74	S	N	4	2N2221-2N915-BFX55	
BFY75	S	N	4	2N2221-2N915-2N2222A-BC107A-2N3947	
BFY76	S	N	4	2N929-2N2483-BCY66	
BFY77	S	N	4	2N929-2N930-BCY66	

BLX10

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BLX10	S	N	6A		
BLX11	S	N	6A		
BLX12	S	N	6A		
BLX16	S	N	6A		
BLX17	S	N	6A		
BLX18	S	N	6A		
BLX19	S	N	27A		
BLX20	S	N	27A		
BLX21	S	N	27A		
BLX22	S	N	27A		
BLX23	S	N	27A		
BLX24	S	N	27A		
BLX25	S	N	27A		
BLX26	S	N	27A		
BLX27	S	N	27A		
BLX28	S	N	27A		
BLX29	S	N	27A		
BLX30	S	N	27A		
BLX31	S	N	27A		
BLX32	S	N	27A		
BLX33	S	N	27A		
BLX34	S	N	27A		
BLX35	S	N	27A		
BLX36	S	N	27A		
BLX40	S	P	6A		
BLX41	S	P	6A		
BLX42	S	P	6A		

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BLX46	S	P	6A		
BLX47	S	P	6A		
BLX48	S	P	6A		
BLX49	S	P	27A		
BLX50	S	P	27A		
BLX51	S	P	27A		
BLX52	S	P	27A		
BLX53	S	P	27A		
BLX54	S	P	27A		
BLX55	S	P	27A		
BLX56	S	P	27A		
BLX57	S	P	27A		
BLX58	S	P	27A		
BLX59	S	P	27A		
BLX60	S	P	27A		
BLX61	S	P	27A		
BLX62	S	P	27A		
BLX63	S	P	27A		
BLX82	S	N	12	2N5039	
BLX83	S	N	12	2N5038	
BLX84	S	N	12	2N5038	
BLX85	S	N	12		
BLX86	S	N	12		
BLX87	C	N	12		
BLY14	S	N	27A	SFT443-2N3553	
BLY15	S	N	12	SFT443A-2N3553	
BLY15A	S	N	12	2N3632	

BLY16

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BLY16	S	N	11	SFT443A	
BLY17	S	N	26	SFT441A-BLY16-2N5071	
BLY20	S	N	27A	BLY16-SFT443A-2N3375	
BLY21	S	N	27A	BLY16-SFT443A-2N3632	
BLY22	S	N	27A	SFT440-2N3375-2N3632	
BLY25	S	N		2N4116	
BLY26	S	N		2N4115	
BLY27	S	N	27A	SFT440-2N3375-2N3632	
BLY28	S	N	27A	SFT443A-BLY16	
BLY29	S	N		2N4075	
BLY30	S	N		2N4076	
BLY33	S	N	6A		
BLY34	S		6A		
BLY35	S	N	17B	2N3375	
BLY36	S	N	17B	MSA8506-2N3375-BLY59	
BLY37	S	N	17B		
BLY38	S	N	17B		
BLY40	S	N	spec		
BLY47	S	N	12	2N4915-2N3054	
BLY48	S	N	12		
BLY49	S	N	12	BU110	
BLY50	S	N	12	BU110	
BLY53	S	N	17B		
BLY53A	S	N	17B		
BLY55	S	N	17B	MSA8507	
BLY57	S	N	27A	2N3926-2N3632	
BLY58	S	N	27A	2N3937-2N3632	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BLY59	S	N	27A	2N3375	
BLY60	S	N	27A	2N3927-2N3622-2N3375	
BLY61	S				
BLY62	S	N		MSA8507	
BLY63	S	N		MSA8506	
BLY64	S	N		2N5002	
BLY65	S	P		2N5003	
BLY66	S	N		2N5004	
BLY68	S	N		2N5069	
BLY70	S	N		2N4915	
BLY72	S	N		2N5006	
BLY75	S	N		2N5025	
BLY76	S	N	17B		
BLY78	S	N	27A		
BLY79	S	N	27A		
BLY80	S	N	37		
BLY81	S	N	37		
BLY82	S	N	spec		
BLY83	S	N	17B		
BLY84	S	N	17B		
BLY85	S	N	17B		
BLY87	S	N	17B		
BLY88	S	N	17B		
BLY89	S	N	17B		
BLY90	S	N	17B		
BLY91	S	N	17B		
BLY92	S	N	17B		

BLY93

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BLY93	S	N	17B		
BLY94	S	N	17B		
BLY97	S	N	17B		
BSS10	S	N	4	BSX20-2N3261	
BSS11	S	N	4	2N3369-2N2369A	
BSS12	S	N	4	BSX20-2N3011	
BSS13	S	N	6A	2N5189-2N3053	
BSS14	S	N	6A	BFX34-2N5262	
BSS15	S	N	6A	BSV94-2N5320	
BSS16	S	N	6A	BSV93-2N5321	
BSS17	S	P	6A	2N5322-2N4036	
BSS18	S	P	6A	2N5323-2N4036	
BSS19	S	N	39B	BSW69	
BSS20	S	N	39B	BSW69	
BSS30	S	N	6A		
BSS31	S	N	6A		
BSS32	S	N	6A		
BSV15	S	P	6A		
BSV16	S	P	6A		
BSV17	S	P	6A		
BSV21	S	P	6A	2N2894	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSV22			5C	Fet	
BSV23	S	N	21E		
BSV24	S	N	21E		
BSV25	S	N	21E		
BSV26	S	N	21E		
BSV27	S	N	21E		
BSV28	S	N	21E		
BSV29	S	N	21E		
BSV33	S	P	21E		
BSV35	S	N	35		
BSV36	S	N	35		
BSV37	S	P	35		
BSV38	S	N		Fet	
BSV39	S	N		Fet	
BSV51	S	N	20	BSX21	
BSV52	S	N	35	BC122	
BSV53	S	N	spec		
BSV54	S	N	spec		
BSV55	S	P	spec		
BSV59	S	N	4		
BSV60	S	N	6A		
BSV61	S	N	spec		
BSV62	S	N	spec	2N4393	
BSV63	S	N	spec		
BSV64	S	N	6A	BFX34-BSX63.6	
BSV68	S	P	4		
BSV69	S	N	6A		

BSV77

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSV77	S	N	6A		
BSV78	S	N	4C	Fet	
BSV79	S	N	4C	Fet	
BSV80	S	N	4C	Fet	
BSV81	S	N	5C	Fet	
BSV82	S	P	6A		
BSV84	S	N	6A		
BSV86	S	N	20B		
BSV87	S	N	20B		
BSV88	S	N	20B		
BSV89	S	N	4		
BSV90	S	N	4		
BSV91	S	N	4		
BSV92	S	N	4		
BSV93	S	N			
BSV94	S	N			
BSV95	S	N	6A		
BSV96	S		20B		
BSV97	S		20B		
BSV98	S		20B		
BSW10	S	N	6A	BSX46-BSX23-BF177-2N2218A-2N699-2N3772-2N3725	
BSW11	S	N	19B	BSW59-BSW13-SE3646-2N3646	
BSW12	S	N	19B	BSX69-BSW13-BF173-2N3646-SE3646-BSY63-2N708	
BSW13	S	N	25	BC146	
BSW19	S	P	4	BCY78VIII-2N3014-2N2906-2N3504-40406-BCY58	2SA548
BSW20	S	P	21A	BC307	
BSW21	S	P	4	BCY72-BCY71-2N2906-BCY78	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSW22	S	P	4	BC178B-BCY79-2N2907-BCY78	
BSW23	S	P	6A	2N2904	
BSW24	S	P	4	2N2906	
BSW25	S	P	4	2N2894A-BCY72	
BSW26	S	N	4	BSX59-2N4047-BSX49-2N3734	
BSW27	S	N	6A	BSX59-2N4047-BSX49-2N3734	
BSW28	S	N	6A	BSX59-2N4047-BSY34-2N3734	
BSW29	S	N	6A	BSX40-2N4046-BSY58-2N3734	
BSW32	S	N	21	BSX21-2N5830-BFY45-MPSL01	
BSW33	S	N	20B	BWW33-BC147A-BFY46-BSX53-2N1711-BSX22	2SC641
BSW34	S	N	20B	BCW47-BFY46-BSX54-2N1711-BSX52A	
BSW35	S	N	20B	BCW46-BSY44-2N1890-2N2405	
BSW36	S	P	6A	2N2907A	
BSW37	S	P	4	2N2894	
BSW38	S	N	4	2N3822	
BSW41	S	N	4	BSX48-2N2221-2N3866-BSX32	2SC321
BSW42	S	N	4	BC238A-BC237A-BC207-BC317-BC183A	
BSW43	S	N	4	BC238B-BC208-BC318-BC237B-BC183B	
BSW44	S	P	4	BC308VI-BC205-BC321-BC213A	
BSW45	S	P	4	BC308B-BC327-BC206-BC322-BC213B	
BSW49	S	N	6A		
BSW51	S	N	6A	BSY34-2N2218	2SC479
BSW52	S	N	6A	BSY34-2N2219-2N2279	
BSW53	S	N	6A	BSY34-2N2218A	2SC479
BSW54	S	N	6A	BSY34-2N2219A	
BSW58	S	N	20B	BSY63-BSX72-2N2369-BSY87	2SC689
BSW59	S	N	20B	BSY62-BSX72-2N2369-BSY88	2SC689

BSW61

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSW61	S	N	4	BSX49-2N221-BFX55	
BSW62	S	N	4	BSX49-2N222-BFX55	
BSW63	S	N	4	BSX49-2N2221A-BFX55	
BSW64	S	N	4	BSX49-2N2221A-BFX55	
BSW65	S	N	6A	BSX6.36-BSW10-2N3019-2N3725	
BSW66	S	N	6A	BSX46-2N3019-2N3712A	
BSW67	S	N	6A	2N3712	
BSW68	S	N	6A	2N3712	
BSW69	S	N	20B	BFY45-2N3712-BF297	2SC857
BSW70	S	N		2N2222	
BSW72	S	P	4	2N2906-BC237.16-2N5447	
BSW73	S	P	4	BC327.25-2N2907-2N5447	
BSW74	S	P	4	BC237.16-2N2906-2N5448	
BSW75	S	P	4	BC237.25-2N2907-2N5448	
BSW82	S	N	4	BSX48-2N2221-SX3706-BSW61	
BSW83	S	N	4	BSX48-2N2222-SX3705-BSX49-BSW61	
BSW84	S	N	4	BSX49-2N2221A-SX3705-BSX49	
BSW85	S	N	4	BSX49-2N2222A-2N5449	
BSW88	S	N	21	BSW33-BC167A-2N3692-BC183	
BSW89	S	N	21A	BSW33-BC167A-2N3692	
BSW92	S	N	4	BC184	
BSW93	S	P			
BSX12	S	N	6A	BSY58-2N3303	
BSX19	S	N	4	BSX48-2N2368-2N2369	2SC689
BSX20	S	N	4	BSX48-BSY19-2N2369	2SC689
BSX21	S	N	4	BFY45-BFY80-2N1990R-2N1893-2N2990	2SC857
BSX22	S	N	6A	BSX45-BSW26-BFY50-BSX62-2N1613-2N4231-BD509-BC140-2N3724	

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSX23	S	N	6A	BFX34-BSX82-BSW26-2N1613-2N3725-BC141-BSW10	
BSX24	S	N	4	BSX51A-BSW27-BSW41-BCY58-2N221-BCY59	2SC907
BSX25	S	N	4	BSX24-BCY59-BSX51A-BSW82-BSW41-2N2222-BFW32-2N913-2N956	
BSX26	S	N	4	BSY19-BSY63-2N708-2N2368-2N3013	
BSX27	S	N	4	BSX20-2N2368-2N709-BSY17	
BSX28	S	N	4	BSX20-2N2368-2N2369	
BSX29	S	P	4	2N2906-2N2894-BCY78-BSY41-BSW19	
BSX30	S	N	6A	2N2410-2N2846-BSY34-2N4846	
BSX32	S	N	6A	2N2218-2N3725-BSY34-BSW85	
BSX33	S	N	4	2N2218A-2N3110	
BSX35	S	P	4	BSX20-2N2906-2N3304	
BSX36	S	P	4	BSW41-2N2906-2N2907	
BSX38	S	N	4	BSX24-BSY19-BSX51-BCY58VII-2N2222-2N708	2SC907
BSX39	S	N	6A	BSX20-2N708	
BSX40	S	P		BSV15.6-2N2904-BC160	2SA537
BSX41	S	P		BSV.15.16-2N2905-BC160-BC139	
BSX44	S	N	4	2N2218A-2N709	
BSX45	S	N	6A	BSX22-2N3252-2N4231-2N3110-2N3109-BFY55	
BSX46	S	N	6A	BSV64-2N3252-2N3108-2N3107	
BSX47	S	N	6A		
BSX48	S	N	4	2N2221-2N4013	
BSX49	S	N	4	2N2222-2N4013	
BSX51	S	N	4	BCY58-2N2222-BSW62-BSX38-2N697	
BSX51A	S	N	4	SFT714A-BC107A-2N2222A	
BSX52	S	N	4	BCY58-2N2222-BC107B	
BSX53	S	N	4	BSX51-BCY58-2N2222-2N1613	2SC907
BSX54	S	N	4	BSX51A-BC107A-BCY58-2N2222A-2N1711	2SC907

BSX59

TIPO	G = GERMANIO S = SILICIO	PNP P = N =	ZOCCHO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSX59	S	N	6A	BSX45-2N3725-2N2218A	2SC479
BSX60	S	N	6A	BSX45-2N3724-2N2219A	2SC479
BSX61	S	N	6A	BSX45-2N3725-2N2219A	2SC479
BSX62	S	N	6A	BSW65-BFX34-2N1889-BFY51	
BSX63	S	N	6A	BSW65-BFX34-2N1893-BFY50	
BSX66	S	N	4	BC108A-2N743-BCY58-BSX69-2N1893	2SC321
BSX67	S	N	4	BC108A-2N744-BCY58-BSX69	2SC321
BSX68	S	N	20B	BC148-2N2884	2SC641
BSX69	S	N	20B	BC148-BFY39-2N2884	
BSX70	S	N		2N2222	
BSX71	S	N		2N2222	
BSX72	S	N	6A	BSY78-2N2218-2N3724-2N2219-BC140	2SC479
BSX73	S	N		2N2218	
BSX74	S	N		BSX74-2N2219	
BSX75	S	N	4	BSW41-BSX48-2N4013-2N3704A-BSW61	
BSX76	S	N		2N2369	
BSX77	S	N		2N2369	
BSX78	S	N		2N2369	
BSX79	S	N	4	BSX51A-BSY74-BCY59VII-2N2222-2N2219	
BSX80	S	N	20B	BSX68-BSY63-2N708-BFX45	2SC641
BSX81	S	N	20	BSW33-BCY58-2N718-2N2410-BFX45	
BSX82	S	N	7A	Fet	
BSX87	S	N	4	2N914	
BSX88	S	N	4	2N708	
BSX89	S	N	4	2N706A	
BSX90	S	N	4	2N743	
BSX91	S	N	4	2N744	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSX92	S	N	4	2N2368	
BSX93	S	N	4	2N2369	
BSX94	S	P		2N4707	
BSX95	S	N	6A	BSX45	2SC479
BSX96	S	N	6A	BSX45	2SC479
BSX97	S	N	4	BSX48-2N218	
BSY10	S	N	8	BSY45-BCY65E-BFY50-BSY44-BF177-2N735-2N2222	
BSY11	S	N	8	BSY44-BFY50-BCY59VII-2N736-2N2222	
BSY17	S	N	4	BSY70-BSY21-2N743-2N914-2N2368	2SC321
BSY18	S	N	4	BCY16-BSY21-BSY70-BSX20-2N744-2N2368	2SC321
BSY19	S	N	4	BSY63-BSX20-2N708	2SC321
BSY20	S	N	4	BSY18-BSY62-BSY70-2N706B-BC108	
BSY21	S	N	4	BSY21-BSX20-BSY18-BSY63-2N914	2SC321
BSY22	S	N	4	BF115-BSY63-2N916-2N3014-2N708-BSX38	
BSY23	S	N	4	BSY-2N834-2N3014-2N2368-2N708-BSX38	
BSY24	S	N	6A	BSX72-BSX62-BSY58-BSY91-2N2218	
BSY25	S	N	6A	BSX62-2N2218-BSX72	
BSY26	S	N	6A	BSY18-BSY19-BSY39-2N706A-2N914	
BSY27	S	N	6A	BSY18-BSY39-2N753-2N914-BSY21	
BSY28	S	N	6A	BSY19-BSY38-BSY21-2N708-2N743-2N914	
BSY29	S	N	6A	BSX70-BSY21-BSY39-2N708-2N744-2N914	
BSY32	S	N	4	BSX70-BSY29-BSY38-2N743-BSY17-BSY21	
BSY33	S	N	4	BSX70-BSY29-BSY39-2N744-BSY18-BSY21	
BSY34	S	N	6A	BFY44-BSX61-BSX73-2N2218-2N3724	2SC479
BSY35	S	P	spec		
BSY36	S	N	4	BSY21-BSY38-BSY70-2N708-2N743-BSY17	
BSY37	S	N	4	BSY21-BSY38-BSY70-2N708-2N743-BSY17	

BSY38

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSY38	S	N	4	BSY21-BSY19-2N708-2N743-BSY17	2SC321
BSY39	S	N	4	BSY19-BSY21-2N708-2N744-BSY18	2SC321
BSY40	S	P	4	BCY78-2N2297-2N2894	2SA548
BSY41	S	P	4	BCY78-2N2894	2SA548
BSY42	S	N		BFY12-BSX73-2N2219	
BSY43	S	N		BFY12-BSX73-2N2219	
BSY44	S	N	6A	BSX45-BSX95-2N1613-BFY67	2SC708A
BSY45	S	N	6A	BC141.6-2N1893-2N3498	2SC708A
BSY46	S	N	6A	BFY55-BSX46-2N1613-2N1893-2N2193-BFY45	2SC708A
BSY47	S	N	4	BSY20-BSY62-BSY70-2N706A	
BSY48	S	N	4	BSY20-BSY62-BSY70-2N706A	
BSY50	S	N	4	BSY20-BSY62-BSY70-2N706A	
BSY51	S	N	6A	BFY34-BSX45-2N697	2SC479
BSY52	S	N	6A	BFY34-BSX45-2N1420-2N1711-2N2219	2SC479
BSY53	S	N	6A	BFY34-BSX46.6-BSX45-BSY44-BSY67-2N1613	2SC479
BSY54	S	N	6A	BFY46-BSX46.10-BSX45-BSY71-2N1711-2N2219A	
BSY55	S	N	6A	BFY14C-BSY45-BSX46.6-2N1893-2N3498	
BSY56	S	N	6A	BFY14D-BSX46.10-2N1890-2N1893	
BSY58	S	N	6A	BFY44-BSX73-2N2218-2N3724	2SC479
BSY59	S	P	20	BS328	
BSY60	S	N		2N706A	
BSY61	S	N	21	BC238A-2N706A	2SC641
BSY62	S	N	4	BSY62-BSY70-BSX20-2N706A	2SC321
BSY63	S	N	4	BSY19-BSX20-2N708-2N2369	2SC321
BSY68	S	N		BFY65-2N1990-2N3114	
BSY70	S	N	4	BSY62-BSX19-2N706	2SC321
BSY71	S	N	6A	BFY46-BSX45.16-2N1711-2N2219-2N2219A-BFY68	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BSY72	S	N	4	BC108A-BCY58VII-BC139A-BC130A-BC182A-BC207A-MPS6520-2N930	2SC648
BSY73	S	N	4	BSX53-BC108A-BSY63-BCY58VII-BC182A-BC130A-MPS6520-2N2221	2SC907
BSY74	S	N	4	BFY46-BC108A-BSX53-BCY58VII-BC182A-BC130A-BC107-MPS6520-2N929	2SC907
BSY75	S	N	4	BFY33-BCY58VII-BSX51A-BSX79-2N2221-BC107	2SC907
BSY76	S	N	4	BFY12C-BSX45-BCY59-2N2221-2N2222-BC107	2SC907
BSY77	S	N	4	BFY34-BCY65E-BSX45-BSX56-BSX21-2N2219-2N2222A-2N2221A	
BSY78	S	N	4	BFY46-BSX45-2N2222A-2N3019-BCY65-2N1711	
BSY79	S	N	4	BFY45-BFY80-BSX45-2N2990R-2N3114	2SC857
BSY80	S	N	4	BC108-BC109-BC108A-2N930-MPS6520-BCY58VIII-BC130C-BC184	2SC907
BSY81	S	N	6A	BSX65.6-BSX72-2N2218-2N3110	2SC708
BSY82	S	N	6A	BSX45.10-BSY72-2N2219-2N3109	
BSY83	S	N	6A	BSY40-BSY46-BSX45.6-2N1613-2N2218A-2N2297-2N310	2SC708
BSY84	S	N	6A	BSX45.10-2N2219A-2N3109	
BSY85	S	N	6A	BSY46-2N1893-2N3108-2N2193A	2SC708A
BSY86	S	N	6A	BSX46.10-2N1893-2N3107-2N3019	
BSY87	S	N	6A	BFC14C-BC141.6-2N1893-2N3108	
BSY88	S	N	6A	BFY14D-BC141.10-2N1893-2N3107-2N3019	
BSY89	S	N	4		
BSY90	S	N	6A	BFY46-BC140.16-2N1711-2N2219-BSX45	
BSY91	S	N	6A	BFY33-BSX60-BSX25-BSX48-BSX51A-2N2218-2N3353	2SC708
BSY92	S	N	6A	BFY34-BSX45.6-2N2219-2N1613	2SC479
BSY93	S	N	4	BCY65E-2N2222	
BSY95	S	N	4	BSX73-BSY62-BSY58-BC108A-2N2218-2N2369	2SC321
BSY149A	S	N		BSX66	
BSY149B	S	N		BSX67	
BSY152A	S	N		BSX19	
BSY152B	S	N		BSX70	

BU100					EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
TIPO	G = GERMANIO S = SILICIO	PNP P = NPN	ZOCCHOLO			
BU100	S	N	12			
BU102	S	N	12			
BU103A	S	N	11	2N4912		
BU104	S	N	12	BU108		
BU105	S	N	12			2SC937
BU106	S	N	12			
BU107	S	N	12			
BU108	S	N	12			
BU109	S	N	12	BU108		
BU110	S	N	13			
BU111	S	N	12	BU126		
BU113	S	N	12			
BU114	S	N	12			
BU115	S	N	12			
BU116	S	N	12			
BU117	S	N	12			
BU120	S	N	12	BDY98		
BU121	S	N	12			
BU122	S	N	12			
BU123	S	N	12			
BU125	S	N	6A			
BU126	S	N	12			
BU127	S	N	12			
BU128	S	N	12			
BUY12	S	N	13	BDY91		
BUY13	S	N	13	BDY91-BDY93		2SC665
BUY14	S	N	11	BDY61-2N4911		2SD125A

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
BUY16	S	N		BDY90	
BUY17	S	N		BDY60	
BUY18	S	N	12	BU110	
BUY19	S	N		2N5730	
BUY20	S	N	12		
BUY21	S	N	12		
BUY22	S	N	12		
BUY23	S	N	12		
BUY24	S	N	12	2N5069	
BUY26	S	N		2N3442	
BUY35	S	N	12		
BUY38	S	N	11		
BUY43	S	N	11		
BUY44	S	N	12		
BUY46	S	N	11	2N3045	
BUY47	S	N	6A		
BUY48	S	N	6A		
BUY51A	S	N	27B	2N3772	
BUY56	S	N	13		
BUY57	S	N	12		
BUY58	S	N	12		
BUY72	S	N	13		
BUY73	S	N	12		

CDT1311

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
CDT1311	G	P	12	AD131-AD151-ASZ17-AUY21IV-AUY28	
CDT1313	G	P	12	AD132-AUY22IV-ASZ15-ASZ16-ASZ18-2N1100	
CK13	G	P	6A	ASY27	
CK14	G	P		2N1307	
CK17	G	P		2N1309	
CK22	G	P	2A	AC125	
CK65	G	P	6A	ASY27	
CK66	G	P	2A	AC125	
CK721	G	P	2A	AC125-AC126-OC71-2N2429	
CK722	G	P	2A	AC125-AC126-OC71-2N2429	
CK724	G	P	2A	AC125-AC126-2N2429	
CK725	G	P	2A	AC125-AC126-OC71-2N2429	
CK727	G	P	2A	AC125-AC126-OC71-2N2429	
CK751	G	P	2A	AC128-AC132-OC72-2N2431	2N281
CK759	G	P	5A	AF127-AF185-OC45	
CK760	G	P	5A	AF127-AF185-OC45	
CK761	G	P	5A	AF126-AF127-AF185	
CK762	G	P	5A	AF126-AF185-OC44	
CK766	G	P	5A	AF126-AF185-OC44	
CK766A	G	P	5A	AF126-AF185-OC44	
CK790	S	P		BCZ10	
CK791	S	P		BCZ11	
CK793	G	P	6A	ASY77-OC77	
CK870	G	P	2A	AC125-AC126-2N2429	
CK871	G	P	2A	AC125-AC126-2N2429	
CK872	G	P	2A	AC128-AC132-OC72-2N2431	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
CK878	G	P	2A	AC128-OC74-2N2431	
CK882	G	P	2A	AC128-AC132-OC72-2N2431	
CK888	G	P	2A	AC128-AC132-OC72-2N2431	
CK891	G	P	2A	AC125	
CK892	G	P	2A	AC125	
CK896	G	P		OC57	
CK896A	G	P		OC57-OC58	
CK897	G	P		OC58	
CK897A	G	P		OC58	
CK898	G	P		OC59	
CK898A	G	P		OC59-OC77	
CTP1003	G	P	12	ASZ15-OC28	
CTP1004	G	P	12	AD149-OC26-2N2836	
CTP1005	G	P	12	AD149-OC26-OC27-2N2836	
CTP1006	G	P	12	ASZ16-OC29	
CTP1032	G	P	2A	AC125-AC126-2N2429	
CTP1033	G	P	2A	AC125-AC126-2N2429	
CTP1034	G	P	2A	AC125-AC126-2N2429	
CTP1035	G	P	2A	AC125-AC126-2N2429	
CTP1036	G	P	2A	AC126-2N2429	
CTP1104	G	P	12	AD130III-OC26-AD149-OC30-2N2062A-2N2836	
CTP1108	G	P	12	AD130-AD149-OC26-2N2061A-2N2836	
CPT1109	G	P	12	AD130-AD150-AD149-T1158-OC26-2N2061A-2N2836	
CTP1111	G	P	12	AD131-AD132-ASZ15-2N2065A	2SB472
CTP1320	G	P	12	AC125-AC126-2N2429	

CTP1330

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
CTP1330	G	P	2A	AC125-AC126-2N2429	
CTP1340	G	P	2A	AC125-AC126-2N2429	
CTP1350	G	P	2A	AC125-AC126-2N2429	
CTP1360	G	P	2A	AC126-2N2429	
CTP1390	G	P	5A	AF127-AF185-OC45	
CTP1400	G	P	5A	AF127-AF185-OC45	
CTP1410	G	P	5A	AF126-AF185-OC44	
CTP1500	G	P	12	AD138-AUY22-ASZ12-ASZ16-AUY21-2N1100-2N1556	
CTP1503	G	P	12	AD104-AUY22-AD138-ASZ16-ASZ12-2N1100-2N1555	
CTP1504	G	P	12	AD133-AUY21-AD138-AUY28-AD153-ASZ18-2N1554	
CTP1508	G	P	12	AD133-AD136-ADZ11-AD138-2N1553	
CTP1509	G	P	26	ADZ12	
CTP1514	G	P	12	AD149-OC26-2N2836	
CTP1551	G	P	12	ASZ15	
CTP3500	G	P	26	ADZ12	
CTP3503	G	P	26	ADZ12	
CV2389	G	P		GET114-V10/30A-OC71	
CV2400	G	P		GET106-V10/30A-OC71	
CV7001	G	P		ACY31-2G303-GET103	
CV7002	G	P		2G382-GET116	
CV7003	G	P	32	ASY55-2G302-OC44	
CV7004	G	P	32	ASY54-GET873-OC45	
CV7005	G	P		GET103-2G371-OC71-2N280	
CV7006	G	P		GET103-OC72-V10/50A-2N281-2N374	
CV7007	G	P		GET111-2G377-OC77	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
CV7008	G	P		GET106-V10/50A	
CV7009	G	P		GET110-V60201P	
CV7010	G	P		OC26-V30/30P-2N1314	
CV7011	G	P		V60/30P	
CV7012	G	P		V60/30P	
CV7042	G	P	32	ASY63-2G302-TK29B	2S322
CV7043	S	P	18A	BCZ10	2S323
CV7044	S	P	18A	BCZ11	2S002
CV7056	S	N			2S003
CV7057	S	N			2S004
CV7058	S	N			2S005
CV7059	S	N			2S014
CV7080	S	N			2S012A
CV7081	S	N			2S017
CV7082	S	N			2S018
CV7083	S	N			2S019
CV7064	S	N			2S020
CV7065	S	N			2S013A
CV7066	S	N			
CV7074	G	P		GET103	2S323
CV7075	S	P		OC201	
CV7080	G	P		GET571	
CV7081	G	P		GET572	
CV7082	G	P		GET573	
CV7083	G	P		NKT402-OC29	
CV7084	G	P		NKT404-OC35	
CV7085	G	P		NKT401	

CV7087

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
CV7087	G	P		2G306	
CV7089	G	P		2G401	
CV7107	G	P	2A	ACY31	
CV7131	S	N		2N1564	
CV7132	S	N		2N1565	
CV7134	S	N		2N1564	
CV7149	S	P			2S302
CV7151	S	P			2S303
CV7152	S	P			2S301
CV7154	S	N			2S103
CV7185	G	P		ASY66	
CV7326	G	P		2G377	
CV7327	G	P		2G371	
CV7328	S	N			2S104
CV7333	S	N			2S025
CV7334	S	N			2S026
CV7336	S	N		2N743	
CV7337	S	N		2N744	2S131
CV7341	S	P			2S300
CV7342	S	P			2S300
CV7343	S	P			2S300
CV7344	S	P			2S300
CV7345	S	P			2S300
CV7346	S	P			2S300
CV7348	G	N		2N1302	
CV7349	G	N		2N1304	
CV7350	G	N		2N1306	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
CV7351	G	N		2N1308	
CV7352	G	P		2N1303	
CV7353	G	P		2N1305	
CV7354	G	P		2N1307	
CV7355	G	P		2N1309	
CV7361	S	N		BUY11	
CV7362	S	N		BSY25-2N2217	
CV7363	S	P			2S305
CV7366	S	P			2S305
CV7371	S	N		2N2220	
CV7372	G	N		2N2221	
CV7379	S	N		2N916	
CV7390	G	P		2G102	
CV7391	G	P		2G110	
CV7393	G	P		2N705	
CV7394	G	P		2N711	
CV7396	S	P			2S307
CV7404	S	N		2N1893	
CV7430	S	N		BSY26	
CV7431	S	N		BSY27-2N753	
CV7440	S	N		2N1613	
CV7448	G	P	32	ASY60	
CV7459	S	P			2S300
CV7461	S	N			2S103
CV7462	S	P		2N2411	
CV7463	S	P		2N2412	
CV7484	S	N		2N706A	

CV7477

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
CV7477	S	N		O63	
CV7478	S	N		2N918	
CV7479	S	N		2N2060	
CV7490	S	N		BFY17	
CV7491	S	N	4	BFY18	
CV7492	S	N		2N929	
CV7493	S	N		2N930	
CV7495	S	N		2N696	
CV7496	S	N		2N697	
CV7497	S	N		C64	
CV7554	S	N		2N2475	
CV7555	S	N		2N2369A	
CV7580	S	P		2N1131	
CV7581	S	P		2N1132	
CV7588	C	N			2S104P
CV7596	S	N			2S103
CV7598	S	P			2S301
CV7629	S	N			2S024
CV7630	S	P		2N2696	
CV7631	S	P		2N2904	
CV7648	S	N		BSY95A	
CV8414	S	N		DT1121	
CV8415	S	N		DT1111	
CV8416	S	N		DT1112	
CV8424	S	N		DT4111	
CV8615	S	N		BSY95A	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
D40D	S	N		2N6121	
D40D1	S	N		TIP29	
D40D3	S	N		TIP29	
D40D2	S	N		TIP29	
D40DA	S	N		TIP29A	
D40D5	S	N		TIP29A	
D40D7	S	N		TIP29A	
D40D8	S	N		TIP29A	
D41D	S	P		2N6124	
D41D1	S	P		TIP30	
D41D2	S	P		TIP30	
D41D4	S	P		TIP30A	
D41D5	S	P		TIP30A	
D41D7	S	P		TIP30A	
D41D8	S	P		TIP30A	
D42C	S	N		2N6121	
D42C1	S	N		TIP31	
D42C2	S	N		TIP31	
D42C3	S	N		TIP31	
D42C4	S	N		TIP31A	
D42C5	S	N		TIP31A	
D42C7	S	N		TIP31A	
D42C8	S	N		TIP31A	
D43C	S	P		2N6124A	
D43C1	S	P		TIP32	
D43C2	S	P		TIP32	
D43C3	S	P		TIP32	

D43C4

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
D43C4	S	P		TIP32A	
D43C5	S	P		TIP32A	
D43C7	S	P		TIP32A	
D43C8	S	P		TIP32A	
D44C	S	N		2N6121	
D45C	S	P		2N6124	
DR100	G	P		TS1-TS14	
DR101	G	P		TS1	
DR102	G	P		TS2-TS14	
DR108	G	P		TS1	
DR109	G	P		TS14-TS1	
DR110	G	P		TS3	
DR126	G	P		TS1-TS14-2N465-OC66	
DR127	G	P		TS2-TS14	
DR128	G	P		OC65-OC66-2N465	
DR129	G	P		TS2-TS14-2N465	
DR130	G	P		TS1	
DR131	G	P		TS1	
DS25	G	P	7	AF185	
DS26	G	P	2A	AC128-2N2431	
DS34	G	P	7	AF178-2N2495	
DS41	G	P	7	AF178-2N2495	
DS44	G	P	2A	AC127-2N2430	
DS46	G	P	2A	AC126-2N2429	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
DT80	G	P		CTP1502-2N677C-2N1031B	
DT100	G	P		CTP1500-2N677C-2N1031C	
DT103	S	N	6A	BFY44	
DT111	S	N		ZT1479	
DT112	S	N		ZT1480	
DT1121	S	N		ZT481	
DT1122	S	N		ZT1482-BDY11	
DT1511	S	N		ZT1700	
DT1521	S	N		ZT2270	
DT4110	S	N	12	BDY10	
DT4111	S	N		ZT1488	
DT4121	S	N		ZT1490	
DW6208	S	N	4A	BC107B-BC129B-BC182B-MPS6566	
DW6577	S	N	4A	BC107A-BC182-MPS6566-BC135	
DW6737	S	N	4A	BC107A-MPS6566	
DW7000	S	N	5A	BF167	
DW7035	S	N	4	BC167B-BC113-BC182B-BC171B-MPS6566	
DW7039	S	N	5	BF110-BF178-BF156-BF117-BF257	
DW7050	S	N	6	BF232-BF176-BF173-BF223-BF224-BF371	2SC464
EN697	S	N	8	2N697	
EN706	S	N		2N706	
EN708	S	N		2N708	
EN718A	S	N		2N718A	
EN722	S	P	4A	2N722	
EN744	S	N		2N744	

EN870

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
EN870	S	N		2N870	
EN871	S	N		2N871	
EN914	S	N		2N914-FX914	
EN915	S	N		2N915	
EN916	S	N		2N916	
EN918	S	N	4	2N918-FX918	
EN930	S	N	4	2N930	
EN956	S	N	4	2N956	
EN1132	S	P	8	2N1132	
EN1614	S	N		2N1613	
EN1711	S	N		2N1711	
EN2219	S	N	8	2N2219	
EN2222	S	N	4	2N2222-FX2222	
EN2369A	S	N		2N2369A-FX2369A	
EN2484	S	N	4	2N2484-FX2484	
EN289A	S	P		2N2449A-FX2494A	
EN2905	S	P		2N2905	
EN2907	S	P	4	2N2907-FX2907	
EN3009	S	N		2N3009	
EN3011	S	N		2N3011	
EN3013	S	N		2N3013-FX3013	
EN3014	S	N		2N3014-FX3014	
EN3250	S	P		2N3250	
EN3502	S	P	8	2N3502-FX3502	
EN3504	S	P	4	2N3504	
EN3903	S	N		2N3903-FX3903-FT3903	
EN3904	S	N		2N3904-FX3904-FT3904	

TIPO	G = GERMANIO S = SILICIO	PNP NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
EN3905	S	P		2N3905-FX3905-FT3905	
EN3906	S	P		2N3906-FX3906-FT3906	
EN3962	S	P		2N3962-FX3962	
EN4123	S	N		2N4123	
EN4124	S	N		2N4124	
EN4125	S	P		2N4125	
EN4126	S	P		2N4126	
FPSA12	S	N		MPSA12	
FPSA13	S	N		MPSA13	
FPSA14	S	N		MPSA14	
FPSA65	S	P		MPSA65	
FPSA66	S	P		MPSA66	
FPS6507	S	N		2N5770-T1S86-2N4275-2N4996	
FPS6511	S	N		MPS6511-TIS87	
FPS6512	S	N		MPS6512-TIS99	
FPS6513	S	N		MPS6513-TIS99	
FPS6514	S	N		MPS6514-TIS98	
FPS6515	S	N		MPS6515-TIS97	
FPS6516	S	P		MPS6516-2N5447	
FPS6517	S	P		MPS6517-2N5447	
FPS6518	S	P		MPS6518-2N5447	
FPS6519	S	P		MPS6519-2N5447	
FPS6520	S	N		MPS6520-TIS98	
FPS6521	S	N		MPS6521-TIS97	

FPS6522

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
FPS6522	S	P		MPS6522-2N5447	
FPS6523	S	P		MPS6523-2N5447	
FPS6530	S	N		MPS6530-T1S92	
FPS6531	S	N		MPS6531-T1S92	
FPS6532	S	N		MPS6532-T1S92	
FPS6533M	S	P		MPS6533M-2N3644	
FPS6534M	S	P		MPS6534M-2N3644-T1S93	
FPS6535M	S	P		MPS6535M-T1S93-2N3638	
FPS6539	S	N		PE4030B-SE5032	
FPS6540	S	N		PE5030-SE5030B	
FPS6543	S	N		PE5030B-SE5030B	
FPS6544	S	N		PE5030B-SE5030B	
FPS6546	S	N		PE5030-SE5030B	
FPS6547	S	N		PE5030-SE5030B	
FPS6548	S	N		PE5030B-SE5030B	
FPS6560	S	N		BC287	
FPS6561	S	N		FPS6561	
FPS6562	S	P		SE6562	
FPS6563	S	P		SE6563	
FPS6565	S	N		FPS6566	
FPS6566	S	N			
FPS6567	S	N		PE5030B-SE5030B	
FPS6568	S	N		SE5052	
FPS6569	S	N		FPS6570	
FPS6570	S	N		FPS6569	
FPS6571	S	N		2N5133	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
FT107A	S	N		SE4022-FX107A	
FT107B	S	N		SE4021-FX107B	
FT107C	S	N		SE4020-FX107C	
FT709	S	N		2N709	
FT2974	S	N		2N2974	
FT2975	S	N		2N2975	
FT2978	S	N		2N2978	
FT2979	S	N		2N2979	
FT3903	S	N		2N3946-FX3903	
FT3904	S	N		FX3904-DN3904-2N3947	
FT3905	S	P		2N3250-FX3905	
FT3906	S	P		DN3906-2N3251-FX3906	
FT3909	S			2N3909	
FT4017	S	P		2N4017	
FT4018	S	P		2N4018	
FT4019	S	P		3N4019	
FT4020	S	P		2N4020	
FT4021	S	P		2N4021	
FT4022	S	P		2N4022	
FT4023	S	P		2N4023	
FT4024	S	P		2N4024	
FT4025	S	P		2N4025	
FX107A	S	N		FT107A	
FX107B	S	N		FT107B	
FX107C	S	N		FT107C	

FX709

TIPO	G = GERMANIO S = SILICIO	PNP P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
FX709	S	N		FT709	
FX914	S	N		EN914-2N914	
FX918	S	N		EN918-2N918	
FX2368	S	N		2N2368-2N2369A-FX369A	
FX236A	S	N		EN2369A-2N2369-2N2369A	
FX2483	S	N		2N2483-2N2484-FX2484	
FX2484	S	N		EN2484-2N2484	
FX2894	S	P		2N2894	
FX2894A	S	P		2N2894A-EN289A	
FX2907	S	P		EN2907	
FX3013	S	N		EN3013-2N3014-2N3013-EN3014	
FX3014	S	N		EN3014-2N3014	
FX3299	S	N		2N3299-2N3300-FX3300	
FX3300	S	N		2N3300-2N3302	
FX3502	S	P		EN3502-2N3502	
FX3503	S	P		2N3055-2N3645-2N3503	
FX3724	S	N		2N3724-2N4013	
FX3725	S	N		2N3725-264047	
FX3903	S	N		2N3903-EN3903-FT3903	
FX3904	S	N		2N3904-FT3904-EN3904	
FX3905	S	P		2N3905-FT3950-EN3905	
FX3906	S	P		2N3906-FT3906-EN3906	
FX3962	S	P		EN3962-2N3962	
FX3963	S	P		2N3963	
FX3964	S	P		2N3964	
FX3965	S	P		2N3965	
FX4034	S	P		2N4034-2N4121	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
FX4046	S	N		2N4046-2N4047-FX4047	
FX4047	S	N		2N4047-FX3724-2N4014-2N3724	
FX4207	S	P		2N4207	
FX4960	S	N		2N4962-2N4963	
GA004	G	P	6A	ASY27	
GA52828	G	P		AC126-2N2429	
GET	G	P	2A	AC125-AC126-V10/50A-2N185-2N2429	
GET4	G	P	2A	AC125-AC126-NKT228-2N185-2N2429	
GET5	G	P	2A	AC125-NKT304-V30/201P	
GET6	G	P		NKT226-TS3-V10/50A-2N185	
GET7	G	P		V15/30NP	
GET8	G	P		V30/30NP	
GET9	G	P		NKT401	
GET15	G	P		V15/201P	
GET16	G	P		V30/201P	
GET20	G	P		V30/201P	
GET102	G	P	2A	AC125-AC132-2N2429-AC156	
GET103	G	P	2A	AC126-AC132-ASY58-2N2429	
GET104	G	P	2A	AC126-ASY59-2G303-2N2429	
GET105	G	P		NKT304-V60/201P	
GET106	G	P	2A	AC126-AC128-AC132-2N2429	
GET110	G	P	6A	ASY80-V60/201P-NKT303	
GET111	G	P	32A	ACY30-NKT227-2G377	

GET113

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
GET113	G	P	2A	AC128-ACY30-2G301	
GET114	G	P	2A	AC128-ACY30-2G301-2N2431	
GET115	G	P		NKT304-NKT351-V15/201P	
GET116	G	P		NKT304-V30/201P	
GET120	G	P		NKT303-V30/201P	
GET535	G	P		NKT228	
GET536	G	P		NKT228	
GET538	G	P		NKT227	
GET571	G	P		NKT404-V15/30NP-2N456	
GET572	G	P		NKT404-OC35-XC141-2N456	
GET573	G	P		NKT403-V60/30NP-2N457	
GET574	G	P		NKT403	
GET581	G	P		NKT401	
GET582	G	P		NKT403	
GET583	G	P		NKT404	
GET584	G	P		NKT402	
GET870	G	P	4	AC170	
GET871	G	P		OC41-XA151-2G301	
GET872	G	P		OC42-XA152-2G302	
GET873	G	P	5A	AF127-AF185-OC45	
GET874	G	P	5A	AF126-AF185-OC44	
GET875	G	P	6A	ASY27-OC43-2G306	
GET880	G	P	6A	ASY26-ASY27	
GET883	G	P	5A	AF127-AF185	
GET884	G	P	5A	AF126	
GET885	G	P		2N1309	
GET889	G	P	6A	ASY27	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
GET891	G	P		2G303	
GET892	G	P		2G304	
GET896	G	P	6A	ASY27	
GET897	G	P		NKT142	
GET898	G	P		NKT141	2SB220
GFT20	G	P	2A	AC125-AC151IV-AC151-AC122r-AC162-AC126-2N2429-2N1190-2N238	2SB459
GFT20R	G	P	4	AC150-AC162-AC172	2SB32
GFT21	G	P	2A	AC126-AC151-AC162-AC125-2N2429	2SB219
GFT25	G	P	4	AC122-AC151-AC125-AC122r-AC163-AC126-2N1190-2N2429-2N238	2SB101-2SB459
GFT26	G	P	12	AD149-OC26	
GFT31	G	P	2A	AC126-AC131-AC152	2SB220
GFT32	G	P	2A	AC128-AC152I-AC132-AC124-AC153-2N4106-2N2429	2SB222
GFT33	G	P	2A	AC152-AC124R-AC128-2N610	2SB32
GFT34	G	P	1	AC106-AC124-AC128	2SA219
GFT41	G	P	5	AF106-AF178-AF190-2N2495	2SA230
GFT42A	G	P	5A	AF132-AF178-SFT358-2N2495-2N384	2SA116
GFT42B	G	P	5	AF134-AF135-AF185-2N384	2SA116
GFT43	G	P	3	AC124-AC128-AC152V	
GFT43	G	P	5	AF136-AF137-AF185-2N310	2SA154
GFT44	G	P	5A	AF132-AF137-AF185	
GFT44/15	G	P	5A	AF126-AF127-AF185-2N137	HJ23D
GFT45	G	P	5A	AF132-AF137-AF185-2N136	2SA206
GFT2006	G	P	12	OC16-AD149-T1156-2N456	2SB471
GFT2006/30	G	P	12	AD130-AD149-OC30-2N68-2N2836	2SB240

GFT3008/20

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOC COLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
GFT3008/20	G	P	12	AD130-AD149-OC30-2N2836	2SB86
GFT3008/40	G	P	11	AD139-AD131-AD148-AD138-AD149-2N2836-T13029	2SB86-2SB471
GFT3008/60	G	P	12	AD131-AD139-AD148	2SB86
GFT3108/20	G	P	12	AD132	
GFT3108/40	G	P	12	AD130-ASZ15-AD149-AD132IV-2N2065	2SB472
GFT3108/60	G	P	12	AD131-AD139	
GFT3108/80	G	P	12	AD132	
GFT3408/20	G	P	12	AD130-AD149-OC26-2N2836	
GFT3408/40	G	P	12	AD130-AD131-AD149-AD138-OC26-2N2836-T13029-2N1295-2N2065	2SB83
GFT3408/60	G	P	12	AD105-AD131-ASZ18-2N268	
GFT3408/80	G	P	12	AD132	
GFT3708/20	G	P	12	AD130	
GFT3708/40	G	P	12	AD131-ASZ16-AD138/50-T1329-2N2066	
GFT3708/60	G	P	12	AD131	
GFT3708/80	G	P	12	AD132	
GFT4012	G	P	12	OC26	
GFT4012/15	G	P	12	AD131-AD149-OC26-2N1295	2SB83
GFT4012/30	G	P	12	AD130-AD149-OC26-2N1295-T13029-2N2836-2N2063	2SB83
GFT4012/60	G	P	12	AD131-OC60-SFT240-2N268	2SB86
GFT4112/30	G	P	12	AD131	
GFT4112/60	G	P	12	AD131	
GFT4308/40	G	P	12	AD130-AD149-T13029-2N257	
GFT4308/60	G	P	12	AD131	
GFT4308/80	G	P	12	AD132	
GFT4412	G	P	12	AD131	
GFT4412/30	G	P	12	AD130-AD149I-T13029-2N57	
GFT4608/60	G	P	12	AD131-AD138/50-T1329-2N2066	

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
GFT4712/30	G	P	12	AD130	
GFT4712/60	G	P	12	AD131-AD138/50-T1329-2N2066	
GFT8024	G	P	12	AD149-CTP1514-OC26-2N2836	
GM0290	G	P	5A	AF139-2N2244-MM139-2N5043	M9031
GM0290A	G	P	5B	AF139-2N2244-MM139-2N5043	M9031
GM0760	G	P	5B	AF109-AF190-AF106-AF180	2SA432
GM0761	G	P	5B	AF106-AF190	2SA230
GT3	G	P	2A	AC125-AC126-2N2429	
GT4A	G	P	2A	AC128-AC132-2N2431	
GT11	G	P	5A	AF127-AF185-OC45	
GT12	G	P	5A	AF127-AF185-OC45	
GT13	G	P	5A	AF126-AF185-OC44	
GT14	G	P	2A	AC128-ASY77-OC72-2N2431	
GT144	G	P		OC58-OC66	
GT20	G	P	2A	AC128-AC132-OC72-2N2431	
GT20H	G	P		OC58-OC66	
GT31	G	P	2A	AC125-AC126-2N2429	
GT32	G	P	2A	AC128-AC132-2N2431	
GT33	G	P	2A	AC128-AC132-2N2431	
GT34	G	P	2A	AC125-AC126-2N2429	
GT34HV	G	P	6A	ASY77-OC77	
GT34S	G	P	2A	AC125	
GT38	G	P	2A	AC125-AC126-OC71-2N2429	

GT41

TIPO	G = GERMANICO S = SILICIO			ZOCCHIO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
	P = PNP N = NPN					
GT41	G	P	7		AF185-ASY27	
GT42	G	P	7		AF185-ASY27	
GT43	G	P	7		AF185-ASY27	
GT45	G	P	6A		ASY26-ASY27	
GT70	G	P	6A		ASY26	
GT74	G	P	2A		AC126-2N2429	
GT81	G	P	2A		AC126-AC128-OC72-2N2429-2N2431	
GT81H	G	P	2A		AC126-OC58-OC66-2N2429	
GT81HS	G	P	2A		AC126-2N2429	
GT81R	G	P	2A		AC128-AC132-2N2431	
GT83	G	P	2A		AC125-AC126-2N2429	
GT87	G	P	2A		AC125-AC126-2N2429	
GT88	G	P	6A		ASY26	
GT109	G	P	2A		AC128-OC72-2N2431	
GT190R	G	P	2A		AC128-AC132-2N2431	
GT122	G	P	2A		AC126-OC76-2N2429	
GT161	G	P	5A		AF126-AF185	
GT222	G	P	2A		AC125-AC126-OC71-2N2429	
GT310	G	P	2A		AC128-2N2431	
GT759	G	P	5A		AF127-OC45	
GT760	G	P	5A		AF127-AF185-OC45	
GT760R	G	P	5A		AF127-AF185-OC45	
GT761	G	P	5A		AF126-AF127-AF185	
GT761R	G	P	5A		AF126-AF185-OC44	
GT762	G	P	7		AF185-OC44	
GT949	G	P	2A		AC125-AF126	

TYPE	G. de l'Etat			EQUIVALENCE EUROPEE-AMERICAINE	EQUIVALENCE IS/1200-1982
	G	P	12		
H2	G	P	12	AD149-2N2836	
H3	G	P	12	AD149-2N2836	
H4	G	P	12	AD149-2N2836	
H8DEF	G	P	7	AF185	
HA1	G	P	2A	AC126-OC66-OC71-2N2429	
HA2	G	P	2A	AC126-OC66-OC71-2N2429	
HA3	G	P	2A	AC126-OC66-OC71-2N2429	
HA8	G	P		OC66-OC60-OC58-OC59	
HA9	G	P		OC66-OC60-OC58-OC59	
HA10	G	P		OC66-OC60-OC58-OC59	
HC1	G	P	2A	AC126-2N2429	
HD197	G	P	2A	AC128-2N2431	
HF1	G	P	7	AF185	
HF2	G	P	7	AF185	
HJ15	G	P	2A	AC126-AC117-AC153-2N362-2N2429	
HJ17	G	P	2A	AC128-2N2431	
HJ17D	G	P	3	AC124-AC128-AC153-2N632-2N2431	
HJ22	G	P	7	AF185	
HJ22D	G	P	5A	AF131-AF137-AF185-2N482-2N483	
HJ23	G	P	2A	AF126-AF136-AF185-2N140-2N412	
HJ23D	G	P	2A	AF126-AF127-AF185-2N411-2N485	
HJ32	G	P	5A	AF131-AF135-AF136-2N370	

HJ34

TIPO	GERMANIO G = S = SILICIO	PNP P = N = NPN	ZOCULO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
HJ34	G	P	2A	AC128-2N2431	
HJ34A	G	P	2A	AC128-2N2431	
HJ35	G	P	12	ASZ16	
HJ37	G	P	5A	AF126-AF132-AF137-2N371	
HJ50	G	P	4	AC122-AC126-AC163-2N215-2N2429	
HJ51	G	P	2A	AC128-AC153-AC180-2N408-2N2431	
HJ54	G	P		2N139	
HJ55	G	P	5A	AF132-AF136-AF185-2N219	
HJ56	G	P	5A	AF133-AF137-AF185-2N410	
HJ57	G	P	5A	AF132-AF136-AF185-2N412	
HJ60	G	P	5A	AF132-AF136-AF185-2N139	
HJ61	G	P	5A	AF127-AF133-AF137-2N219	
HJ62	G	P	2A	AC125-AF185	
HJ70	G	P	5A	AF132-AF135-AF185	
HJ71	G	P	5A	AF132-AF137-AF185-2N140-2N371	
HJ72	G	P	5A	AF132-AF137-AF185-2N140-2N372	
HJ73	G	P	5A	AF132-AF137-AF185-2N373	
HJ74	G	P	5A	AF132-AF136-AF137-2N374	
HJ75	G	P	5A	AF132-AF137-AF185-2N544	
HS3	G	P	6A	ASY27-OC37	
HS4	G	P	6A	ASY27-OC47	
HS15	G	P		2N109	
HS17D	G	P		2N109	
HS22D	G	P		2N139	
HS23D	G	P		2N140	

IF1	EQUIVALENZE EUROPEE-AMERICANE				EQUIVALENZE GIAPPONESI
	US - GERMANO S = SILICIO P = PNP N = NPN	2000000			
IF1	G	P	7	AF185	
IF2	G	P	7	AF185	
IF3	G	P	7	AF185	
1W3377	G	P	4	BFX62-BF180-BF155-BF357	2SC707
J1	G	P		OC72	
J2	G	P		OC72	
J3	G	P		OC72	
JP1	G	P	2A	AC128-OC72-2N2431	
M10H	G	P	7	AF178-2N2495	
M10L	G	N	2A	AC176-2N2495	
M12H	G	P	7	AF178	
MA100	G	P	6A	MA881	
MA112	G	P	6A	MA113	
MA113	G	P	6A	MA114	
MA114	G	P	6A	MA883	
MA115	G	P	6A	MA113	
MA116	G	P	6A	MA114	
MA117	G	P	6A	MA116	
MA200	G	P	6C	MA202	
MA201	G	P	6C	MA201	
MA202	G	P	6C	MA200	
MA203	G	P	6C	MA203	
MA204	G	P	6C	MA201-MA203	

MA205

TIPO	G = GERMATICO S = SILICIO	P = ENP N = NPH	ZUCCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MA205	G	P	6C	MA204	
MA206	G	P	6C	MA205	
MA286	G	P	6A	MA287	
MA287	G	P	6A	MA117	
MA288	G	P	6A	MA884	
MA881	G	P	6A	MA882	
MA882	G	P	6A	MA883	
MA883	G	P	6A	MA884	
MA884	G	P	6A	MA889	
MA885	G	P	6A	MA881-MA886	
MA886	G	P	6A	MA887	
MA887	G	P	6A	MA888	
MA888	G	P	6A	MA889	
MA889	G	P	6A	MA884	
MA909	G	P	6A	MA910	
MA910	G	P	6A		
MA1702	G	P	6A		
MA1703	G	P	6A	MA1704	
MA1704	G	P	6A	MA1705	
MA1705	G	P	6A		
MA1706	G	P	6A	MA1707	
MA1707	G	P	6A	MA1708	
MA1708	G	P	6A		
MC101	G	P	7	AF185	

	PROTECTOR	PROTECTOR	PROTECTOR	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
ME0411	S	P		BC307VI	
ME0412	S	P		BC307A	
MFT122	G	P		AC128-2N2431	
MF123	G	P		AC128-2N2431	
MHT5501	S	N		2N4300	
MHT5502	S	N		2N4300	
MHT5503	S	N		2N4300	
MHT5504	S	N		2N4300	
MHT5505	S	N		2N4300	
MHT5506	S	N		2N4300	
MHT5507	S	N		2N4300	
MHT5508	S	N		2N4300	
MHT6408	S	N		2N3996	
MHT6409	S	N		2N3996	
MHT6410	S	N		2N3996	
MHT6411	S	N		2N3996	
MHT6412	S	N		2N3996	
MHT6413	S	N		2N3996	
MHT6414	S	N		2N3996	
MHT6415	S	N		2N3996	
MHT6416	S	N		2N3996	
MHT7011	S	N		2N4301	
MHT7012	S	N		2N4301	
MHT7013	S	N		2N4301	
MHT7014	S	N		2N4301	

MHT7015

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MHT7015	S	N		2N4301	
MHT7016	S	N		2N4301	
MHT7017	S	N		2N4301	
MHT7018	S	N		2N4301	
MHT7019	S	N		2N4301	
MHT7401	S	N		2N3421	
MHT7402	S	N		2N3421	
MHT7403	S	N		2N3421	
MHT7404	S	N		2N3421	
MHT7405	S	N		2N3421	
MHT7406	S	N		2N3421	
MHT7407	S	N		2N3421	
MHT7408	S	N		2N3421	
MHT7409	S	N		2N3421	
MHT7410	S	N		2N3421	
MHT7411	S	N		2N3421	
MHT7412	S	N		2N3421	
MHT7413	S	N		2N3421	
MHT7414	S	N		2N3421	
MHT7415	S	N		2N3421	
MHT7416	S	N		2N3421	
MHT7417	S	N		2N3421	
MHT7418	S	N		2N3421	
MHT7419	S	N		2N3421	
MHT7801	S	N		2N5387	
MHT7802	S	N		2N5387	
MHT7803	S	N		2N5387	

TIPO	G = GERMANICO S = SILICIO P = PNP N = NPN			ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MHT7804	S	N			2N5387	
MHT7805	S	N			2N5387	
MHT7806	S	N			2N5387	
MHT7807	S	N			2N5387	
MHT7808	S	N			2N5387	
MHT7809	S	N			2N5387	
MHT8002	S	N			2N4002	
MHT8004	S	N			2N4002	
MHT9001	S	N			2N4002	
MHT9002	S	N			2N4002	
MHT9003	S	N			2N4002	
MHT9004	S	N			2N4002	
MHT9005	S	N			2N4002	
MHT9006	S	N			2N4002	
MHT9007	S	N			2N4002	
MHT9008	S	N			2N4002	
MHT9009	S	N			2N4002	
MHT9010	S	N			2N4002	
MHT9011	S	N			2N4002	
MHT9012	S	N			2N4002	
MJ423	S	N	12		BDY96	
MJ431	S	N	12		BDY96	
MJ450	S	P	12		2N4398	
MJ480	S	N	12		2N4913	

MJ481

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCcolo	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MJ481	S	N	12	2N4914	
MJ490	S	P	12	2N4904	
MJ491	S	P	12	2N4905	
MJ1800	S	N	12	BDY98	
MJ2249	S	N	11	MJ2250	
MJ2250	S	N	11		
MJ2251	S	N	11	MJ2252	
MJ2252	S	N	11		
MJ2253	S	N	11	MJ2254	
MJ2254	S	N	11		
MJ2255	S	N	12	2N3713	
MJ2257	S	N	12	2N3714	
MJ2267	S	P	12	2N4901	
MJ2268	S	P	12	2N4902	
MJ2801	S	N	12	2N3713	
MJ2802	S	N	12	2N3714	
MJ2901	S	P	12	2N4901	
MJ3010	S	N	11	MJ3011	
MJ3011	S	N	11		
MJ3029	S	N	12	BDY95	
MJ3101	S	N	11		
MJ3201	S	N	11		
MJ3202	S	N	11		
MJE101	S	P	29	BD132-TIP34	
MJE102	S	P	29	TIP34A	
MJE103	S	P	29	TIP34	
MJE104	S	P	29	TIP34A	

MP500

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHIO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MP500	G	P	26	MP504	
MP501	G	P	26	MP505	
MP502	G	P	26	MP506	
MP504	G	P	26	MP500	
MP505	G	P	26	MP501	
MP506	G	P	26	MP506	
MP525	G	P	12		
MP939	G	P	12	AU105-AU103-2N1906	
MP1612	G	P	12	MP1612A	
MP1612A	G	P	12	MP1612B	
MP1612B	G	P	12		
MP1613	G	P	12		
MP2060	G	P	12	MP2061	
MP2061	G	P	12	MP2062	
MP2062	G	P	12	MP2063	
MP2063	G	P	12		
MPS292	S	N		BC238B	
MPS370	S	N		BC238	
MPS404	S		21E		
MPS404A	S		21E		
MPS653	S	N		BC237A	
MPS706	S	N	21E	2N5772-2N4270	
MPS706A	S	N	21E	2N5772-2N4275	
MPS834	S	N	21E	2N5772-2N4275	
MPS918	S	N	21E	TIS62-EN918-2N5770	
MPS2369	S	N	21E	2N5770-2N4275	
MPS2711	S	N	21E	2N2711-2N5135-2N3691	

MPS	SILKING			ZOOLOG	EQUIVALENCE EUROPEE-AMERICAINE	EQUIVALENCE JAPONAISE
	S	N	P			
MPS2712	S	N	21E		2N2712-2N3692-2N5135	
MPS2713	S	N	21E		2N2713-2N4275-2N5135	
MPS2714	S	N	21E		2N2714-2N4275-2N5235	
MPS2715	S	N	21E		MPS2711-2N3691-2N5135	
MPS2716	S	N	21E		MPS2712-2N3692-2N5135	
MPS2894	S	P	21E			
MPS2923	S	N	21E		TIS99-2N5135-2N2923	
MPS2924	S	N	21E		TIS98-2N2924-2N5135	
MPS2925	S	N	21E		TIS98-2N3565	
MPS2926	S	N	21E		2N3691-2N3692	
MPS3392	S	N	21E		2N3392-EN4124-SE6002	
MPS3393	S	N	21E		2N3392-SE1001-SE6002	
MPS3394	S	N	21E		2N4123-EN4123	
MPS3395	S	N	21E		2N3395-SE6002	
MPS3396	S	N	21E			
MPS3397	S	N	21E		MPS3396	
MPS3398	S	N	21E			
MPS3563	S	N	21E		TIS62-2N3563	
MPS3638	S	P	21E		2N5354-2N3638-2N5356-2N5448	
MPS3638A	S	P	21E		2N5355-2N5447-2N3638A	
MPS3639	S	P	21E		2N3639	
MPS3640	S	P	21E		2N3640	
MPS3646	S	N	21E		2N3646	
MPS3693	S	N	21E		2N3826-2N3903-EN3903-2N3693	
MPS3694	S	N	21E		2N3827-EN3904-2N3904-2N3694	
MPS3702	S	P	21E		EN3638A	
MPS3703	S	P	21E		2N3638	

MPS3704

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHOLO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MPS3704	S	N	21E	2N3704-2N3566	
MPS3705	S	N	21E	2N3705-2N3566-SE6001	
MPS3706	S	N	21E	2N3706-2N3566	
MPS3707	S	N	21E	2N3707-SE4010-SE4124	
MPS3708	S	N	21E	2N3708-EN4123-EN4124	
MPS3709	S	N	21E	2N3709-EN4123	
MPS3710	S	N	21E	2N3710-EN4124	
MPS3711	S	N	21E	2N3711-EN3904-2N3565	
MPS3721	S	N	21E	2N3721-2N3692-2N5135	
MPS5172	S	N	21E	2N2124	
MPS5551M	S				
MPS6506	S	N		TIS86-2N4996	
MPS6507	S	N		TIS86-2N5770-2N4996-SE3002	
MPS6508	S	N		TIS86-2N4996	
MPS6509	S	N		TIS84	
MPS6510	S	N		TIS84	
MPS6511	S	N	21E	TIS87-FPS6511-SE3005	
MPS6512	S	N	21E	TIS99-2N4124-2N4123-FPS6512	
MPS6513	S	N	21E	TIS99-EN4124-FPS6513	
MPS6514	S	N	21E	BC207-TIS98-FPS514	
MPS6515	S	N	21E	BC207-BC209-TIS97-FPS6515	
MPS6516	S	P	21E	2N5447-EN3905-FPS6516	
MPS6517	S	P	21E	2N5447-FPS6517-EN3905	
MPS6518	S	P	21E	2N5447-FPS6518-EN3906	
MPS6519	S	P	21E	2N5447-FPS6519-EN4126	
MPS6520	S	N	21E	TIS98-FPS6520-SE4020	
MPS6521	S	N	21E	TIS97-FPS6521-SE4020	

	CLASSIFICAZIONE S - SOSTITUIBILE P - PULIZIA N - NIENTE	CLASSIFICAZIONE S - SOSTITUIBILE P - PULIZIA N - NIENTE	CLASSIFICAZIONE S - SOSTITUIBILE P - PULIZIA N - NIENTE	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MPS6522	S	P	21E	25447-FPS6522-EN4126	
MPS6523	S	P	21E	2N5447-FPS6523-EN4126	
MPS6528	S	N		TIS84	
MPS6529	S	N		TIS106	
MPS6530	S	N	21E	TIS92-2N4944-FPS6530	
MPS6531	S	N	21E	TIS92-FPS6531-2N4946	
MPS6532	S	N	21E	BC237A-TIS92-FPS6532-2N3566	
MPS6533	S	P	21E	BC177IV-TIS93-2N3644-MPS6533M	
MPS6533M	S	P	21E	FPS6533M	
MPS6534	S	P	21E	BC177A-TIS93-2N3644-MPS6534M	
MPS6534	S	P	21E	FPS6534M	
MPS6535	S	P	21E	BC177V-TIS93-MPS6535M	
MPS6535M	S	P	21E	FPS6535M	
MPS6539	S	N		PE4030B-2N3690-SE5032-FPS6539	
MPS6540	S	N		FPS6540-PE5030B-SE5030B	
MPS6541	S	N		TIS86-2N4996	
MPS6542	S	N		TIS82-PE5030B-SE503B	
MPS6543	S	N		TIS86-SE5030B-PE5030B-FPS6543	
MPS6544	S	N		TIS87-SE5030B-PE5030B-FPS6544	
MPS6545	S	N		TIS87-SE5030B-PE5030B	
MPS6546	S	N		TIS86-SE5030B-PE5030B-FPS6546	
MPS6547	S	N		TIS86-SE5030B-PE5030B-FPS6547	
MPS6548	S	N		PE5030B-FPS6548-SE5030B	
MPS6552	S	N		TIS98	
MPS6553	S	N		TIS97	
MPS6554	S	N		TIS97	
MPS6555	S	N		TIS97	

MPS6560

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHIO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MPS6560	S	N	21E	TIS92-FPS6560-SE6560	
MPS6561	S	N	21E	TIS92-SE6561-FPS6561	
MPS6562	S	P	21E	TIS93-FPS6562-SE6562	
MPS6563	S	P	21E	FPS6563-TIS93-SE6563	
MPS6564	S	N	21E	2N4994	
MPS6565	S	N	21E	TIS99-FPS6565-EN3903	
MPS6566	S	N	21E	TIS98-FPS6566-EN3904	
MPS6567	S	N		TIS86-SE5030B-FPS6567-PE5030B	
MPS6568	S	N		FPS6568	
MPS6569	S	N		FPS6569	
MPS6570	S	N		FPS6570	
MPS6571	S	N	21E	SE4020-EPS6571	
MPS6579	S	P		TIS37	
MPS6590	S	N		MPSA06	
MPS6591	S	N		MPSA05	
MPSA05	S	N	21E	2N3404-2N3416-2N5856-2N6010	
MPSA06	S	N	21E	2N3405-2N3417-2N5856-2N6012	
MPSA09	S	N	21E	2N5209-SE4020	
MPSA10	S	N	21E	MPSA20-2N3903-2N3693	
MPSA12	S	N		FPSA12	
MPSA13	S	N		FPSA13	
MPSA14	S	N		FPSA14	
MPSA20	S	N	21E	2N3903	
MPSA55	S	P	21E	2N6011-2N6015-2N5857-2N6017	
MPSA56	S	P	21E	2N5857-2N3645	
MPSA65	S	P		FPSA65	
MPSA66	S	P		MPSA65-FPSA66	

	W = CHIAVARI S = CILIGERO	P = PHIP N = NPH	ZOLZOO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
MPSA70	S	P	21E	2N3905	
MPSH02			21F		
MPSH10	S	N	21F	2N5770-SE3002-SE3005	
MPSH11	S	N	21F	2N5770-SE3005-SE3002	
MPSH32	S	N	21F	PE5010-SE056	
MPSH37	S	N	21F	PE5030B-SE5030B	
MPSL01	S	N	21E	2N5831	
MPSL07	S	P	21E	2N5771	
MPSL08	S	P		2N5771	
MPSL51	S	P	21E	2N4889	
MPSU05	S	N	34	BD137	
MPSU06	S	N	34	BD139	
MTC70	G	P		AC128-2N2431	
MTC71	G	P		AC126-2N2429	
MTC72	G	P		AC128-2N2431	
MTC76	G	P		AC128-2N2431	
NKT52	G	P		NKT72	
NKT53	G	P		NKT73	
NKT54	G	P		NKT73	
NKT62	G	P		NKT72	

NKT63

TIPO	G = GERMANICO S = SILICONO	P = PNP N = NPN	0 1 2 3 4 5 6 7 8 9 A B C D E F G H I J K L M N O	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
NKT63	G	P		NKT73	
NKT64	G	P		NKT73	
NKT74	G	P		NKT73	
NKT122	G	P		2GT102	
NKT123	G	P		2GT102	
NKT124	G	P		2N1309	
NKT125	G	P		2GT102-2N1305	
NKT126	G	P		2GT102	
NKT127	G	P		2N1309	
NKT128	G	P		2GT102-2N1305	
NKT129	G	P		2GT102	
NKT132	G	P		AF185	
NKT133	G	P		AF185	
NKT142	G	P		2GT102	
NKT143	G	P		2GT102	
NKT152	G	P		NKT162	
NKT153	G	P		NKT163	
NKT154	G	P		NKT164	
NKT162	G	P		2GT102	
NKT163	G	P		NKT163	
NKT164	G	P		NKT164	
NKT172	G	P		NKT162	
NKT173	G	P		NKT163-2G371	
NKT174	G	P		NKT164	
NKT182	G	P		NKT162	
NKT183	G	P		NKT163	
NKT184	G	P		NKT164	

NKT	EQUIVALENZ EUROPEISCHER DAHE			EQUIVALENZ EUROPEISCHER DAHE
	AC 126-2N2429	AC 126-2N2429	AC 126-2N2429	
NKT202	G	P		AC126-2N2429
NKT203	G	P		AC126-2N2429
NKT204	G	P		AC126-2N2429
NKT205	G	P		AC126-2N2429
NKT206	G	P		AC126-2N2429
NKT208	G	P		AC128-2N2431
NKT212	G	P		2G303
NKT213	G	P		2G374
NKT214	G	P		2G371
NKT215	G	P		2G371
NKT216	G	P		2G374
NKT217	G	P		2G377
NKT222	G	P		2GT182
NKT223	G	P		AC156
NKT250	G	P		NKT274
NKT251	G	P		AC128-NKT271-2N2431
NKT252	G	P		AC126-NKT274-2N2429
NKT253	G	P		NKT271
NKT254	G	P		NKT274
NKT255	G	P		NKT275
NKT258	G	P		NKT274
NKT260	G	P		NKT274
NKT261	G	P		NKT271
NKT262	G	P		NKT274
NKT263	G	P		NKT271
NKT264	G	P		NKT274
NKT265	G	P		NKT275

NKT268

TIPO	C = GERMANIA S = SILICIO P = FRP N = NFN			EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
NKT268	G	P		NKT274	
NKT270	G	P		NKT274	
NKT271	G	P		AC154-2G302	
NKT272	G	P		AC133-NKT274	
NKT273	G	P		NKT271	
NKT277	G	P		NKT271	
NKT278	G	P		NKT274	
NKT403	G	P		AD140	
NKT450	G	P		NKT452	
NKT453	G	P		NKT452	
NKT713	G	P		AC157	
NKT751	G	P		NKT773	
OC13	G	P	1	AC126-AC125-OC71-2N2429	
OC14	G	P	1	OC4-OC72	
OC16	G	P	12	AD149-OC26-AD130-AD162-2N2836-TI3029-2N2063-2N1314	2SB83
OC22	G	P	12	AUY19-AD603-AD149-SFT213-AD148I-2N157-2N301-2N1022-2N3615	2SB338-2SB42
OC23	G	P	12	AUY19V-CTP111-AD149-AD148V-2N157A-2N1022-2N3615	2SB338
OC24	G	P	12	AUY19V-CTP111-AD149-AD148V-2N157A-2N1022-2N3615	2SB338
OC25	G	P	12	AD149-2N2836	
OC26	G	P	12	AD149-AD153-AD150IV-AD150-2N2836-2N456-TI156-2N1022-2N1314	2SB83
OC27	G	P	12	AD149-2N353-2N1315	
OC28	G	P	12	AUY22-ASZ15-AD146-AUY28-2N174-2N456-2N1073	2SB341-2SB424
OC29	G	P	12	AUY21-AD150-AD138-AUY31-ASZ16-2N174-2N457-2N2870	2SB341-2SB425

	OC	CLASSIFICAZIONE S. - M. - R. - D.	P. - F. - G. M. - N. - D. - R.	ZOC COLO	EQUIVALENTE EUROPEA/AMERICANA	EQUIVALENTE GIAPPONESE
OC30	G	P	11		AD139-AD152-AD149-AD162-AD155-AD148-2N141	2SB86
OC32	G	P	1		OC57-OC58-OC65	
OC33	G	P	1		AC125-AC126-OC65-2N2429	
OC34	G	P	1		AC126-AC125-OC66-2N2429	
OC35	G	P	12		AUY21-AUY31-AD138-AFT214-ASZ17-2N352-2N1073-2N2870	2SB339-2SB425
OC36	G	P	12		AUY22-AD132-AUY28-ASZ18-2N174-2N157A-2N1073-2N2870	2SB341-2SB424
OC37	G	P	1		ASY76-OC76	
OC38	G	P	1		AC126-AC128-AC132-2N2429	
OC41	G	P	1		ASY26-ASY27	
OC42	G	P	1		ASY26-ASY27-AC125	
OC43	G	P	1		ASY27	
OC44	G	P	1		AF185-AF126-ASY27-AF132-AFY15-AF188-2N36-AF137	2SB101
OC45	G	P	1		AF185-AF126-ASY27-AF133-AFY15-AF187-2N36-2N218-AF137	2SB101-2SB45
OC46	G	P	1		ASY46-AF133-ASY26-SFT226-ASY27-2N269	2SA212-2S40
OC47	G	P	1		ASY47-SFT227-ASY27-AF188-2N269	2SA217-2S40
OC57	G	P	22		OC58-AC125-AC151-AC129R-AC122-OC330-2N1190-2N106	2SB47-2SB168
OC58	G	P	22		AC151-OC34-AC122-OC624-AC129-2N106	2SB168
OC59	G	P	22		AC151-AF129-AC122-OC342-AC129-2N106	2SB168
OC60	G	P	22		AC151-AC129-AC122-AF129-AC125-OC342-2N106	2SB169
OC65	G	P	1		OC57-OC622-AC125-OC330	ST301
OC66	G	P	1		AC126-OC624-OC58-OC340-2N2429	ST302
OC70	G	P	1		AC126-AC125-AC151-AC163-AC122-2N2429-2N279	2SB75
OC71	G	P	1		AC126-AC122-AC151-AC163-OC3041-2N2429-2N280	2SB77
OC72	G	P	1		AC128-AC153-AC151-AC131-AC132-2N2431-2N282	2SB89
OC73	G	P	1		AC151IV-OC75-AC126-GFT34	
OC74	G	P	1		AC128-AC124-AC151V-OC318-AC117-AC153-2N2431-2N1924-2N1501	2SB156
OC75	G	P	1		AC126-AC116-AC151-AC131-OC304-2N2429-2N466	2SB89

OC76

TIPO	G = GERMANICO S = SILICIO	P = PNP N = NPN	ZUCCHIO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
OC76	G	P	1	AC151-ASY76-ASY48IV-AC125-AC131-AC152-2N284-2N394	2SB89
OC77	G	P	1	ASY48-ACY24-ASY77-ASY81-AC128-2N24A-2N284A	2SB89
OC78	G	P	1	AC128	
OC79	G	P	1	AC128-AC124-AC152-AC125-AC151-2N2431-OC318-2N223	2SB156
OC80	G	P	1	AC152-ASY80-AC121-AC124-AC126-AC128-OC318	2SB156
OC81	G	P	18A	AC153-AC117R-AC128-OC318-AC184	
OC82	G	P	18A	AC128	
OC83	G	P	18A	AC152-AC124-AC131-AC128-2N1924	
OC84	G	P	18A	AC153-AC124-AC131-AC128-2N4106-2N467-2N1924	2SB222
OC110	G	P	1	AC126-AC125-2N2429	
OC120	G	P	1	AC126-AC125-2N2429	
OC122	G	P	10	AC153-AC124-ASY80-AC152-AC180-2N4106-2N467	2SB222
OC123	G	P	10	ASY48-ASY81-ASY24-ASY77-2N241	
OC130	G	P	1	AC126-AC125-2N2429	
OC139	G	N	1	AC127-AF188-ASY73-SFT259-AF180-2N1090-AF192	2SC89-2SC90
OC140	G	N	1	AC127-SFT260-ASY29-ASY74-2N1091-2N1306-ASY75	2SC90
OC141	G	N	1	AC127-ASY75-SFT261-2N1091-2N1308	2SC91
OC169	G	P	10	AF126-AF137-AF127-AF185-AF133-AF197	
OC170	G	P	10	AF126-AF124-AF136-AF125-AF185-AF133-2N370-2N1110	2SC234
OC171	G	P	10	AF124-AF134-AF125-AF136-AF178-2N2495	2SC135
OC200	S	P	18A	BC177-BC212-BC308-BC204-BC261-BCZ10-MPS6517-2N328	2SA565
OC201	S	P	1	BC177-BC213-BC308-BC205-BC261-BC262-MPS6517	2SA565
OC202	G	P	1	ASY26-ASY27-BCZ11-2N799	2SA155
OC203	S	P	1	BCZ12	
OC204	S	P	1	BCY10	
OC205	S	P	1	BCY11-BCY12	
OC206	S	P	1	BCY12	

EQUIVALENCE EQUIPMENT

1/1/13

OC300	G	P	2A	AC128-AC153-AC152-AC132-AC131	
OC302	G		2A	AC126-AC128-AC153-2N2429	
OC303	G	P	2A	AC151-AC132-AC122-AC163-AC125-2N266	2SB75-2SB219
OC304	G	P	2A	AC152-OC71-OC604-AC151	2SB77-2SB39
OC305	G	P	2A	GFT22-SFT353RA-AC125-AC151-AC126-AC122	2SB77
OC306	G	P	2A	AC125-AC150-AC151-AC161	2SB73-2SB220
OC307	G	P	18	ASY76-AC131-AC151-2N44-AC125-AC184	2SB37
OC308	G	P	18	AC151V-AC132-AC131-AC152-ASY76-AC153-2N280-2N1924-AC184	2SB156A-2SB33
OC309	G	P	18	ASY81-ASZ10-ACY24-ASY77-AC128-2N1924-2N1925-ASY48	
OC318	G	P	18	AC128-AC120-AC121IV-AC121V-2N2431-2N227-AC152	2SB226
OC320	G	P	22	OC58-OC57-OC66	
OC330	G	P	22	OC58-OC65-OC622	
OC331	G	P	22	OC58-AC129R-OC57	
OC340	G	P	22	OC58-OC57-OC624	
OC341	G	P	22	OC58-AC129R-OC57	
OC342	G	P	22	OC59-OC58-OC624G	
OC343	G	P	22	OC60-AC129B-OC59	
OC350	G	P	22	OC60-AC126-OC59-OC75	
OC351	G	P	22	OC60-OC59	
OC360	G	P	22	OC58-OC65-OC623	
OC361	G	P	22	OC58	
OC362	G	P	22	OC59-OC58	
OC363	G	P	22	OC60-OC58	
OC364	G	P		AC150-AC162-AC172	
OC390	G	P		AF185-AF116-AF127-2N409-AF126-2N1924-AF196	2SA31
OC400	G	P		AF185-AF127-ASY32-2N139-AF126-AF136-AF196	
OC410	G	P		AF185-AF126-ASY27-2N411-AF136-AF196	2SA35

OC430

TIPO	G = GERMANIO S = SILICIO	P = PNP N = NPN	ZOCCHO	EQUIVALENZE EUROPEE-AMERICANE	EQUIVALENZE GIAPPONESI
OC430	S	P	2A	BC178IV-BCY33-BSY40-BCY34-BC231B-BCZ11-BC178	2SA35
OC440	S	P	2A	BCY33-BC213-BC177-BC205-BC262-BCY34-BC178-MPS6518	2SA565
OC443	S	P	2A	BC178-BC205-BC262-BCY29-BC213-BC33-MPS6518-BC133	2SA565
OC443K	S	P	2A	BC177-BCZ10-BCY27-BCY29-BCY33	
OC445	S	P	2A	BC177-BC205-BC262-BCY19-BC213-BCY30-MPS6518	2SA565
OC445K	S	P	2A	BC177-BCY19-BCZ12	
OC449	S	P	2A	BC177-BC205-BC262-BCY29-BC213-BCZ12-MPS6518	2SA565
OC449K	S	P	2A	BC178-BCY29-BCZ12	
OC450	S	P	2A	BSV68-BC205-BC262-BCZ12-BC213-MPS6518	2SA565
OC460	S	P	2A	BC178-BC205-BC262-BCY28-BC213-BCY34-MPS6518	2SA565
OC463	S	P	2A	BC178VI-BC205-BC262-BCZ11-BC213-MPS6518	2SA565
OC465	S	P	2A	BC178VI-BCZ11-BC262-BC213-MPS6518	2SA565
OC466	S	P	2A	BC178-BC205-BC262-BCY28-BC213-BCZ11-MPS6518	2SA565
OC466K	S	P	2A	BC178-BCY28-BCZ11	
OC467	S	P	2A	BC178-BC205-BC262-OC467-BC213-BCY28-MPS6518	2SA565
OC468	S	P	2A	BC178-BC205-BC262-OC468-BC213-BCY18-MPS6518	2SA565
OC469	S	P	2A	BC177-BC205-BC262-OC469-BC231B-BCY18-MPS6518	2SA565
OC470	S	P	2A	BC307-BC205-BCY17-BC178-BCZ10-BC262-BCZ11-BCY34-MPS6518	2SA565
OC480	S	P	2A	BCY20	
OC601	G	P	18	AC126-AC125-OC70-2N2429	
OC602	G	P	18	AC126-SFT351-AC151IV-AC152-AC122-AC162-2N2429-2N37-2N238	2SB459-2SB219
OC603	G	P	18	AC151-OC603-AC130-AC162-AC125-AC172-2N238-2N2429-2N207B	2SB451-2SB32
OC604	G	P	18	AC126-AC122-AC151IV-AC125-AC151V-OC604-2N2429-2N34-2N238	2SB451-HJ15
OC610	G	P	18	AF126	
OC612	G	P	18	AF185-AF137-AF127-OC612-AFY15-2N642-2N111-AF197	2SA240-HJ22D
OC613	G	P	18	AF185-SET316-AF126-OC613-AFY15-AF137-2N641-AF132-2N113	2SA240-HJ23D
OC614	G	P	18	AF185-OC614-AF125-AF135-AF136-2N1110-2N370-AF131-AF195	2SA156-HJ32