

July, 197

BRC

BRITISH RADIO CORPORATION LIMITED

BULLETIN

FOR DEALER SERVICE DEPARTMENTS



British Radio Corporation Limited
is a member of the Thorn Group

Classified Replacements for Transistors and Diodes

The Replacement Classification system for semi-conductors was introduced by BRC in 1969 with the object of simplifying the replacement problems caused by a world-wide shortage of semiconductor devices. This shortage results in the wide range of types used in BRC products, and Service Depots having to obtain alternative supplies to maintain replacement stocks of certain types. These, although electrically similar, sometimes differ in shape and/or base connections compared with the device originally fitted in production. In such cases the Classification system serves to reduce confusion and simplifies the ordering of replacements. Because many Classified semi-conductors are common to a number of chassis, they may be stocked by the dealer as replacements for various BRC models resulting in speedier servicing.

IDENTIFICATION

All equipment for which the Classified Replacement system applies have diagrams with semiconductor locations including Classification identification affixed inside the cabinets, and the Classification numbers are also quoted in the appropriate service manuals.

Classified Replacement Transistors and Diodes are individually packaged and clearly identified with the BRC Classification number. When several types are quoted under one Classification, the replacement may be any one of those listed depending upon availability. Base connection diagrams for all possible types are, however, provided.

GROUPING SYSTEM

Although the grouping of various types under the same BRC Classification shown in the chart is not intended to imply that all or any are direct equivalents, each device has been individually assessed in BRC laboratories as being a satisfactory alternative *if used in its specified positions* in BRC products. For example, although BA130 is listed as a suitable replacement for BA114 in Classified Group D17 it *must not be assumed* that BA130 is also a suitable replacement for the BA114 included in Group D2.

AA112	...	D1, D14
AA113	...	D12
AA119	...	D14
AC128	...	AF5, AF8, 0P2A
AC138 (Grp 4 or 5)	...	AF9
AC138 (Grp 5, 6 or 7)	...	AF8
AC141HK (Grp 5 or 6)	...	0P1B
AC141K (Grp 7)	...	0P3B
AC142 (Grp 5 or 6)	...	AF5
AC142HK (Grp 5 or 6)	...	0P1A
AC142K (Grp 7)	...	0P3A
AC151	...	AF8
AC151 (Grp 5, 6 or 7)	...	AF7
AC153	...	AF5
AC156	...	AF7
AC176	...	0P2B
AC192	...	AF7
AD143 (Grp 4 or 5)	...	VS1
AF115	...	RF5
AF116	...	RF6
AF125	...	RF5
AF126	...	RF6
AF139	...	TVT2
AF239	...	TVT1
ATESD4	...	D5
A8A21	...	D3
BA110	...	D6
BA114	...	D2, D17
BA121	...	D6
BA130	...	D17
BA147	...	D2
BA151	...	D2
BB103	...	D7
BB104	...	D9
BC107	...	AF6
BC108B	...	AF3
BC109	...	AF2
BC114	...	AF2, AF15
BC115	...	AF6, TVT8
BC117	...	TVT7
BC119UA	...	AF4
BC140D	...	AF4

BC147	...	TVT8
BC147F	...	TVT7
BC148	...	AF18
BC153	...	AF13
BC154	...	AF1
BC169	...	AF2
BC172B	...	AF3
BC173	...	AF2
BC179B	...	AF1
BC182L	...	TVT8
BC183LB	...	AF3, AF6
BC184L	...	AF2
BC186	...	AF11, AF13
BC187	...	AF1
BC212L	...	AF16
BC213L	...	AF13
BC214L	...	AF1
BC253B	...	AF1
BC259B	...	AF1
BC263B	...	AF1
BFY52	...	AF4
BF157B	...	TVT6
BF160	...	RF1, RF2
BF178	...	TVT6
BF194	...	RF7, TVT4
BF196	...	TVT3
BF197	...	TVT5
BF216	...	RF1
BF217	...	RF2
BF218	...	RF3
BF219	...	RF4
BF224J	...	TVT5
BF237	...	RF3
BF238	...	RF4
BF256BC	...	RF8
BF256S	...	RF8

BF257A	...	TVT6
BF273	...	RF3
BF274	...	RF4
BF367	...	TVT3
BRC194	...	TVT4
BSY54	...	AF4
BY124	...	D8
BY126	...	D15
BY127	...	D16
BY237	...	D15
BY238	...	D16
BZY85/C15	...	D4
BZY94/C15	...	D4
BZX19	...	D4
CG61	...	D14
DFZ005 (Black Base)	...	D13
D1568	...	AF2
D1569	...	AF1
D3	...	D3
E9004	...	AF17B
E9005	...	AF17A
HXC25 (Black Base)	...	D13
IS2068A	...	D10
IS2150A	...	D4
IS44	...	D2
ME4101 (Coded white)	...	TVT8
MPS6520	...	AF2
MPS6521	...	AF2
MPS6522	...	AF1
MPS6523	...	AF1

MR150	...	D4
MSSD7002	...	D13
OA90	...	D1, D12
OC75	...	AF7
SFD104	...	D1, D12
SFD110	...	D14
S6M1	...	D11, D19
TIS90	...	AF4, AF6
TIS90M	...	AF12B
TIS91M	...	AF12A
TV6	...	D11
U14710/1	...	D13
U14727/1	...	AF14
U3540	...	AF2
U3832	...	AF6
U3845/2	...	AF10
U3846	...	AF1
U3847	...	AF4
Y730	...	D8
Y887	...	D13
Y933	...	D18
10D2	...	D11
1N2070	...	D11
2N2904	...	AF10
2N3702	...	AF11
2N3707	...	AF2
2N3711	...	AF2, AF3
2N4058	...	AF1
2N4062	...	AF1

**SERVICE
DEPOTS**

LONDON : PO Box 121, Lea Valley Trading Estate, Angel Road, Edmonton, N.18 ; Tel. 01-807 3060, Spare Parts Tel. 01-807 0791, 24-hour Telephone Answering Service 01-807 6332. MANCHESTER : Thorn House, Derby Street, Cheetham, Manchester 8 ; Tel. 061-832 2499. GLASGOW : 155 Shieldhall Road, Glasgow, S.W.1 ; Tel. 041-882 4512.

AF1*High Gain PNP*

D1569 (2N4062)	...	Base A
BC214L	...	Base A
U3846	...	Base D
BC154	...	Base D
BC253B	...	Base Q
BC263B	...	Base D
MPS6522	...	Base B
MPS6523	...	Base B
BC259B	...	Base Q
BC179B	...	Base D
2N4058	...	Base A
BC187	...	Base D

AF2*High Gain NPN*

D1568 (2N3711)	...	Base A
2N3707	...	Base A
BC184L	...	Base A
U3540	...	Base D
BC114	...	Base D
BC173	...	Base Q
BC109	...	Base D
MPS6520	...	Base B
MPS6521	...	Base B
BC169	...	Base Q

AF3*High Gain NPN*

2N3711	...	Base A
BC183LB	...	Base A
BC172B	...	Base Q
BC108B	...	Base D

AF4*Driver 600mW NPN*

U3847	...	Base D
BC119UA	...	Base D
BFY52	...	Base D
BC140D	...	Base D
BSY54	...	Base D
TIS90	...	Base A

AF5*Germanium PNP*

AC142 (Grp 5 or 6)	Base D
AC153	Base D
AC128	Base D

AF6*Driver 300mW NPN*

U3832 (BC115)	...	Base D
BC107	...	Base D
BC183LB	...	Base A
TIS90	...	Base A

AF7*Germanium PNP*

AC156	...	Base D
AC151 (Grp 5, 6 or 7)	Base D	
AC192	...	Base D
OC75	...	Base D

AF8*Germanium Driver PNP*

AC138 (Grp 5, 6 or 7)	Base D	
AC151	...	Base D
AC128	...	Base D

AF9*Germanium Driver PNP*

AC138 (Grp 4 or 5 only)	Base D
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AF10*Driver 600mW PNP*

U3845/2	...	Base D
2N2904	...	Base D

AF11*Driver 300mW PNP*

2N3702	...	Base A
BC186	...	Base D

AF12A*Driver 600mW PNP*

TIS91M	...	Base A
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AF12B*Driver 600mW NPN*

TIS90M	...	Base A
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AF13*Medium Gain PNP*

BC153	...	Base D
BC213L	...	Base A
BC186	...	Base D

AF14*Driver 600mW NPN*

U14727/1	...	Base D
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AF15*Low Noise NPN*

BC114	...	Base D
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AF16*High Voltage (60V) PNP*

BC212L	...	Base A
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AF17A*High Voltage Driver (600mW) PNP*

E9005	...	Base D
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AF17B*High Voltage Driver (600mW) NPN*

E9004	...	Base D
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AF18*GP Silicon Planar NPN*

BC148	...	Base F
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D1*GP Germanium Diode*

OA90	...
AA112	...
SFD104	...

D2*GP Silicon Diode*

BA151	...
BA147	...
BA114	...
IS44	...

D3*Output Bias Stabilizer*

A8A21	...
D3	...

D4*Zener Diode*

BZX19	...
IS2150A	...
MR150	...
BZY85/C15	...
BZY94/C15	...

D5*Output Bias Stabilizer*

ATESD4	...	Base D
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D6*Vari-Cap Diode*

BA110	...
BA121	...

D7*Vari-Cap Diode*

BB103	...
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D8*Silicon Diode*

BY124	...
Y730	...

D9*Vari-Cap Diode*

BB104	...
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D10*Silicon Diode*

IS2068A	...
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D11*Silicon Diode*

S6M1	...
10D2	...
1N2070	...
TV6	...

D12*Crystal Diode*

OA90	...
SFD104	...
AA113	...

D13*Double Silicon Diode*

HGX25 (Black Base)	Base S
U14710/1	Base S
DFZ005 (Black Base)	Base S
MSSD7002	Base T
Y887	Base S

D14*Crystal Diode*

AA119	...
CG61	...
SFD110	...
AA112	...

D15*Silicon Diode*

BY126	...
BY237	...

D16*Silicon Diode*BY127
BY238**D17***Silicon Diode*BA130
BA114**D18***GP (Bias) Diode*

Y933

D19*Silicon Diode*

S6M1

OP1A*Output PNP*AC142HK (Grp 5 or 6)
Base D**OP1B***Output NPN*AC141HK (Grp 5 or 6)
Base D**OP2A***Output PNP*

AC128 Base D

OP2B*Output NPN*

AC176 Base D

OP3A*Output PNP*

AC142K (Grp 7) ... Base D

OP3B*Output NPN*

AC141K (Grp 7) ... Base D

RF1*Silicon NPN*BF160 Base D
BF216 Base A**RF2***Silicon NPN*BF160 Base D
BF217 Base A**RF3***Silicon NPN*BF273 Base E
BF237 Base C
BF218 Base A**RF4***Silicon NPN*BF274 Base E
BF238 Base C
BF219 Base A**RF5***Germanium PNP*AF125 Base J
AF115 Base H**RF6***Germanium PNP*AF126 Base J
AF116 Base H**RF7***RF-IF Silicon NPN*

BF194 Base G

RF8*VHF FET*BF256S Base U
BF256BC Base U**TVT1***RF Germanium*

AF239 Base R

TVT2*RF Germanium*

AF139 Base R

TVT3*AGC-RF Silicon NPN*BF196 Base G
BF367 Base W**TVT4***IF Silicon NPN*BF194 Base G
BRC194 Base W**TVT5***Large Signal IF Silicon NPN*BF197 Base G
BF224J Base C**TVT6***Video Output Silicon NPN*BF157B Base D
BF178 Base D
BF257A Base D**TVT7***100V Silicon NPN*BC117 Base D
BC147F Base F**TVT8***Silicon NPN*BC147 Base F
BC182L Base A
ME4101 (coded white) Base D
BC115 Base D**VSI***Volt Stab. Germanium*

AD143 (Grp 4 or 5) Base K

★ Types shown in *italic* indicate suitable Mullard replacements also available from usual wholesalers under same numbers.

BASE CONNECTIONS	A	B	C	D	E	F	G	H	J	K	Q	R	S	T	U	W
																