

BIPOLAR TRANSISTORS

Some small signal transistors may have a TO-92 case and a "PN" prefix. The electrical specifications are the same, only the case is changed.

Type	CASE		V _{CE}	V _{CE}	I _C	V _{CEC}	@ I _C	h _{FE}	@ I _C	FT	@ I _C	P _{TOT}	USE	COMPARABLE TYPES
	Polarity		mA				mA		mA	MHz	mA	mW		
BC107	TO-18	NS	45	50	100	0.2	10	110-450	2	300	10	300	G.P. S.S. amp.	BC 207, BC147, BC182
BC108	TO-18	NS	20	30	100	0.2	10	110-800	2	300	10	300	G.P. S.S. amp.	BC 208, BC148, BC13
BC109	TO-18	NS	20	30	100	0.25	10	200-800	2	300	10	300	Low noise S.S. amp.	BC 209, BC149, BC184
BC109C	TO-18	NS	20	30	100	0.25	10	420-800	2	300	10	300	Low noise high gain	BC209C BC149C
BC177	TO-18	PS	45	50	100	0.3	10	75-260	2	150	10	300	G.P. S.S. amp.	BC157, BC307, BC212
BC178	TO-18	PS	25	30	100	0.3	10	75-500	2	150	10	300	G.P. S.S. amp.	BC158, BC 308, BC213
BC179	TO-18	PS	20	25	100	0.3	10	125-500	2	150	10	300	G.P. S.S. amp.	BC159, BC309, BC214
BC327	TO-92VAR1	PS	45	50	500	0.7	500	100-600	100	100	10	625	Output	2N3638
BC328	TO-92VAR1	PS	25	30	500	0.7	500	100-600	100	100	10	625	Output	BC 327
BC337	TO-92VAR1	NS	45	50	500	0.7	500	100-600	100	100	10	625	Output	2N3642
BC338	TO-92VAR1	NS	25	30	500	0.7	500	100-600	100	100	10	625	Output	BC337
BC546	TO-92VAR1	NS	65	80	100	0.6	100	110-450	2	300	10	500	G.P. S.S. amp.	
BC547	TO-92VAR1	NS	45	50	100	0.6	100	110-800	2	300	10	500	G.P. S.S. amp.	BC 107, BC207, BC147
BC548	TO-92VAR1	NS	30	30		0.6	100	110-800	2	300	10	500	G.P. S.S. amp.	BC108, BC208, BC148
BC549	TO-92VAR1	NS	30	30	100	0.6	100	200-800	2	300	10	500	Low noise S.S. amp.	BC109, BC209, BC149
BC549C	TO-92VAR1	NS	30	30	100	0.6	100	420-800	2	300	10	500	Low noise high gain	BC109C, BC149C
BC556	TO-92VAR1	PS	65	80	100	0.65	100	75-475	2	200	10	500	G.P. S.S. amp.	
BC557	TO-92VAR1	PS	45	50	100	0.65	100	75-800	2	200	10	500	G.P. S.S. amp.	BC157
BC558	TO-92VAR1	PS	30	30	100	0.65	100	75-800	2	200	10	500	G.P. S.S. amp.	BC158
BC559	TO-92VAR1	PS	30	30	100	0.65	100	125-800	2	200	10	500	G.P. S.S. amp.	BC159
BC639	TO-92(74)	NS	80	100	1A	0.5	500	40-250	150	130		1W	Audio O/P	MU9610, TT801
BC640	TO-92(74)	PS	80	100	1A	0.5	500	40-250	150	50		1W	Audio O/P	MU9660, TT800
BD139	TO-126	NS	80	10	1.5A	0.5	500	40-250	150	250	50	8W	G.P. O/P	40409
BD140	TO-126	PS	80	10	1.5A	0.5	500	40-250	150	75	50	8W	G.P. O/P	40410
BD262	TO-126	PS	60	60	4A	2.5	1.5A	750	1.5A	7	1.5A	36W	High gain Darl. O/P	BD 266
BD263	TO-126	NS	60	80	4A	2.5	1.5A	750	1.5A	7	1.5A	36W	High gain Darl. O/P	BD267
BD266A	TO-220	PS	80	80	8A	2	3A	750	3A	7		60W	High gain Darl. O/P	
BD267A	TO-220	NS	80	10	8A	2	3A	750	3A	7		60W	High gain Darl. O/P	
BD681	TO-126	NS	100	10	4A	2.5	1.5A	750	1.5A	1		40W	Darlington O/P	BD 263
BD682	TO-126	PS	100	100	4A	2.5	1.5A	750	1.5A	1		40W	Darlington O/P	BD 262
BF173	TO-72(28)	NS	25	40	25			40-100	7	550	5	230	T.V. I.F. amp.	
BF199	TO-92VAR2	NS	25	40	25			37	7	550		500	H.F. amp.	BF180
BF463	TO-202	PS	250	25	500			40-180	30	20		2W	H.V. med. power.	
BF469	TO-126	NS	250	25	50			50	25	60	10	1.8W	G.P. high-V. amp.	
BF470	TO-126	PS	250	25	50			50	25	60	10	1.8W	G.P. high-V. amp.	
BFR90	SOT-37(2)	NS	15	20	25			25-250	14	5GHz	14	180	Wideband amp..	
BFR91	SOT-37(2)	NS	12	15	35	0.3	30	25-250	30	5GHz	30	180	Wideband amp.	
BFY90	TO-72(25)	NS	15	30	25			25-125	2	1GHz	2	200	Wideband amp.	
BUX80	TO-3	NS	400	80	10A	1.5	5A	30	1.2A	8		100W	Def'n, high current	
MJ802	TO-3	NS	90	10	30A	0.8	7.5A	25-100	7.5A	2	1A	200W	High power output	
MJ2955	TO-3	PS	60	70	15A	1.1	4A	20-70	4A	2.5	500	115W	G.P. power	
MJ4502	TO-3	PS	90	10	30A	0.8	7.5A	25-100	7.5A	2	1A	200W	High power output	
MJ10012	TO-3	NS	400	60	10A	2	6A	100-2K	6A			175W	Power Darlington	
MJ15003	TO-3	NS	140	14	20A	1	5A	25-150	5A	2	500	250W	High power output	
MJ15004	TO-3	PS	140	140	20A	1	5A	25-150	5A	2	500	250W	High power output	
MJE340	TO-126	NS	300		500	0.75	100	30-240	50			20W	G.P. H.V. power	

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	Polarity		mA				mA		mA	MHz	mA	mW		
MJE350T	TO-126	PS	300		500	0.77	100	30-240	50			20W	G.P. H.V. power	
MJE2955	TO-220	PS	60	70	10A	1.1	4A	20-100	4A	2	500	75W	G.P. power	TIP 2955
MJE3055T	TO-220	NS	60	70	10A	1.1	4A	20-100	4A	2	500	75W	G.P. power	TIP 3055
MPSA14	TO-92(72)	NS	30	30	500	1.5	100	20000	100	125	10	625	G.R. Darlington	
MPSA65	TO-92(72)	PS	30	30	500	1.5	100	20000	100	100	10	625	G.P. Darlington	
MRF629	TO-39A	NS	16	36	400			20-200	100			5W	UHF power	
MRF660	TO-220A	NS	16	36	2.4A			20-160	250			25W	UHF power	
PN100	TO-92(72)	NS	35	60	500	0.5	100	60-240	150	350	50	600	G.P. amp/switch	PN2222, 2N3643
PN2907	TO-92(72)	PS	40	60	600	0.4	150	100-300	150	200	50	625	High S. switch	
PN200	TO-92(72)	PS	35	60	500	0.5	150	50-400	150	200	50	600	G.P. amp/switch	2N3638, BC214
TIP31B	TOP-66	NS	80	80	3A	1.2	3A	25	1A	3	500	40W	Power output	
TIP32B	TOP-66	PS	80	80	3A	1.2	3A	25	1A	3	500	40W	Power output	
TIP142	TOP-3	NS	100	100	10A	2	5A	>1000	5A			125W	Audio output	TIP140, TIP141
TIP147	TOP-3	PS	100	100	10A	2	5A	>1000	5A			125W	Audio output	TIP145, TIP146
TIP2955	TOP-3	PS	70	100	15A	1.1	4A	20	4A	3	500	90W	Power output	MJE 2955
TIP3055	TOP-3	NS	70	100	15A	1.1	4A	20	4A	3	500	90W	Power output	MJE 3055
2N2222A	TO-18	NS	40	75	800	1.6	500	00-300	150	300	20	500	High S. switch	
2N3019	TO-39	NS	80	140	1A	0.5	500	50-100	500	100	50	800	H.F. amp	
2N3053	TO-39	NS	40	60	700	1.4	150	50-250	150	100	50	2.86W	G.R. switch	BD137
2N3054	TO-66	NS	60	90	4A	0.1	200	25-100	500	0.8	200	25W	Audio output	TIP 31B
2N3055	TO-3	NS	60	70	15A	1.1	4A	20-70	4A	2.5	500	115W	G.P. power	BDY20
2N3563	TO-106	NS	15	30	50			0-200	8	600	8	200	RF-IF amp	BF173
2N3564	TO-106	NS	15	30	100	0.3	20	20-500	15	400	15	200	RF-IF amp	BF167
2N3565	TO-106	NS	25	30	50	0.35	1	150-600	1	400	1	200	Lowlevel amp	BC108, BC208
2N3566	TO-105	NS	30	40	200	1	100	50-600	10	40	30	300	G.R. amp & switch	BC183
2N3567	TO-105	NS	40	80	500	0.25	150	40-120	150	60	50	300	G.P. amp & switch	BC337
2N3568	TO-105	NS	60	80	500	0.25	150	40-120	150	60	50	300	G.P. amp & switch	
2N3569	TO-105	NS	40	80	500	0.25	150	00-300	150	60	50	300	G.P. amp & switch	
2N3638A	TO-105	PS	25	25	500	0.25	50	100	50	150	50	300	G.P. amp & switch	BC328
2N3641	TO-105	NS	30	60	500	0.22	150	40-120		250	50	350	G.P. amp & switch	BC337
2N3642	TO-105	NS	45	60	500	0.22	150	40-120		250	50	350	G.R. amp & switch	BC337
2N3643	TO-105	NS	30	60	500	0.22	150	100-300	150	250	50	350	G.P. amp & switch	BC337
2N3644	TO-105	PS	45	45	500	1	300	100-300	150	200	20	300	G.P. amp & switch	BC327
2N3645	TO-105	PS	60	60	500	1	300	100-300	150	200	20	300	G.P. amp & switch	
2N3771	TO-3	NS	40	50	30A	2	15A	15-60	15A	0.2	1A	150W	Power output	
2N3866	TO-39	NS	30	55	400			0-200	50	500	50	1W	VHF amp	
2N3904	TO-92(72)	NS	40	60	200	0.2	10	00-300	10	300	10	310	Lowlevel amp	BC167A, BF194
2N3905	TO-92(72)	PS	40	40	200	0.4	50	50-200	10	200	20	310	G.P. amp & switch	
2N3948	TO-39	NS	20	36	400			15	50	700	50	1W	VHF amp	
2N4030	TO-39	PS	60	60	1A	0.5	500	25	500	260	100	800	G.P. amp & switch	
2N4250	TO-106	PS	40	40	100	0.25	10	50-700	0.1	50		200	Lowlevel amp	BC559
2N4258	TO-106	PS	12	12	50	0.5	50	30-120	10	700	10	200	Saturated switch	
2N4427	TO-39	NS	20	40	400	0.4	100	10-200	100	500	50	1W	VHF/UHF driver	2N3866
2N5401	TO-92(72)	PS	150	160	6000	0.5	50	60-250	10	100	10	625	H.V. switch	MP SL51
2N6557	TO-202	NS	250	250	500			> 40	50	45		2W	H.V. med power	
2SC710	TO-92/76	NS	25	30	30			90		100		200	G.P. RF amp	BFS18
2SC1306	TOP-66	NS	65	65	3A			0-200	500	300		12W	H.F. output	2SC2166
2SC1307	TOP-66	NS	70	70	8A			0-150	2A	150		25W	H.F. output	2SC1969
2SC1674	TO-92(74)	NS	20	30	20	0.3	10	40-180	1	600	1	250	VHP amp	
2SC1969	TOP-66	NS	30	60	6A			0-180	10	150		20W	H.F. output	2SC1307
2SC2166	TOP-66	NS	75	75	4A			5-180	100					
2SC2694	T-40	NS	17	35	20A			0-180	1A	800		140W	VHF output	MRF 247
2SC3355	TO-92(74)	NS	12	20	100			0-300	20	6.5GHz	20	600	UHFSS	MRF 573
2SC3358	MX	NS	12	20	100			0-300	20	7GHz	20	250	UHFSS	MRF 573