

# 11. SILICON NPN - HIGH POWER TRANSISTORS

IN ORDER OF (1) MIN. DERATING FACTOR  
& (2) TYPE No.

LINE No.	TYPE No.	MIN. DERATE J to C (W/°C)	MAX FREE AIR @ 25°C (W)	M T A E X M P	ABSOLUTE MAX. RATINGS @ 25°C					MAX. hFE				MAX. SAT. RES. (Ω)	tr (s)	STRUCTURE	DWG # Y200 s/a TO200 Ser.	L C O A D E		
					Ic (A)	Ib (A)	BVcbo (V)	BVbeo (V)	BVceo (V)	Icbo @ MAX Vcb @ 25°C (A)	Ic @ Vcb (A)	MIN	MAX						fαe (Hz)	
1	2N4063	57m	10	SS	1.0	500m	450	7.0	350	20u#	100	20m	40	160	15MΔ		F20			
2	2N4064	57m	10	SS	1.0	500m	300	7.0	250	20u#	100	20m	40	160	15MΔ		F20			
3	2N4877	57m	1.0	SJ	4.0	1.0	7.0	5.0	60	100u#	2.0	4.0	20	100 #	30MΔ		TO39	AØ		
4	2N5320	57m	10	SS	2.0	1.0	100	7.0	75	100u#	4.0	500m	30	130	50MΔ	1.0	TO5	AØ		
5	2N5321	57m	10	SS	2.0	1.0	75	5.0	50	100u#	4.0	500m	40	250	50MΔ	1.6	TO5	AØ		
6	2N5482	57m	10	SS	350m	100m	50	3.0	30	3.0m	5.0	50m	20	250	50MΔ		T74	R		
7	2N5699	57m	10	SS	1.0		40	3.0	18	1.5mΔ	100	50m	15				TO129	R		
8	2N5703	57m	10	SS	750m		36	3.0	18	1.0mΔ	5.0	50m	15				TO117	R		
9	2N5764	57m	10	SS	750m	250m	55	3.5	25	5.0mØ	5.0	100m	20				T77	R		
10	2N5767	57m	10	SS	350m	75m	55	3.5	25	5.0mØ	5.0	100m	20				T77	Z		
11	2N5784	57m	10	SS	3.5	1.0	80	5.0	80	1.0m#	2.0	1.0	20	100		625m	TO5	P		
12	2N5785	57m	10	SS	3.5	1.0	65	5.0	65	1.0m#	2.0	1.2	20	100		625m	TO5	P		
13	2N5786	57m	10	SS	3.5	1.0	45	3.5	45	1.0m#	2.0	1.6	20	100		625m	TO5	P		
14	2N5846	57m	10	SS	1.0		36	4.0	18	500uØ	5.0	250m	5.0				TO102	A		
15	2N6197	57m	10	SS	1.0		60	4.0	35	2.0mst							T91	R		
16	2N6202	57m	10	SS	500m		60	4.0	33	2.0mst							T91	R		
17	2N6206	57m	10	SS	500m		50	4.0	30	2.0mst							T93	R		
18	2N6366	57m	10	SS	1.0		36	4.0	18	5.0mst	5.0	250m	5.0	50	50MΔ		TO102	AØ		
19#	2SC778	57m	2.5	SJ	2.0		80	4.0	40	10uØ	100	10 #		150MΔ		PE	F19			
20	40385L	57m	1.0	SJ	1.0		450	7.0	350	20uΔ	100	20m	40	160		10	TO5	AØ		
21	40385S	57m	1.0	SJ	1.0		450	7.0	350	20uΔ	100	20m	40	160		10	TO39	AØ		
22	40390	57m	3.5	SJ	1.0	500m	300	7.0	250	50uΔ	100	20m	40	160	15MΔ		F31	A		
23	40446	57m	10	SJ	1.5			2.5		10u					27M*		F16	AØ		
24	40582	57m	10	SJ	1.5			2.5		10u					27M*		F16	AØ		
25	40594	57m	1.2	SA	2.0	1.0		4.0		10u*	4.0	300m	70	350			TO5	AØ		
26	40594L	57m	1.2	SA	2.0	1.0		4.0		10u*	4.0	300m	70	350			TO5	AØ		
27	40594S	57m	1.2	SA	2.0	1.0		4.0		10u*	4.0	300m	70	350			TO39	AØ		
28	B2-8Z	57m	10	SJ	1.0			3.0	14						175M#		W54	R		
29	B3-12	57m	10	SJ	1.0			4.0	18						175M#		T91	R		
30	B3-28	57m	10	SJ	1.0			4.0	35						175M#		T91	R		
31#	BF257	57m	5.0	SJ	1.0		160	5.0	160	50nØ	100	30m	25		30MΔ	33m	D	TO39	AØ	
32#	BF258	57m	5.0	SJ	1.0		250	5.0	250	50nØ	100	30m	25		30MΔ	33m	D	TO39	AØ	
33#	BF259	57m	5.0	SJ	1.0		300	5.0	300	50nØ	100	30m	25		30MΔ	33m	D	TO39	AØ	
34#	BSS151	57m	10	SJ	2.0	1.0	100	7.0	75	500nØ	4.0	500m	30	120 #	50MΔ		PE	TO39	AØ	
35#	BSS161	57m	10	SJ	2.0	1.0	75	5.0	50	5.0uØ	4.0	500m	40 #	250 #	50MΔ		PE	TO39	AØ	
36#	BUX49T	57m	10	SJ	3.5	700m	150	7.0	90	500uΔ	4.0	1.7	20 #	60 #	8.0MΔ	285m#	80nØ	DM	TO39	AØ
37#	BUX50T	57m	10	SJ	3.5	700m	200	7.0	125	500uΔ	4.0	1.5	20 #	60 #	8.0MΔ	333m#	80nØ	DM	TO39	AØ
38#	BUX51T	57m	10	SJ	3.5	700m	300	7.0	200	500uΔ	4.0	1.0	20 #	60 #	8.0MΔ	500m#	80nØ	DM	TO39	AØ
39#	BUX52T	57m	10	SJ	3.5	700m	350	7.0	250	500uΔ	4.0	850m	20 #	60 #	8.0MΔ	588m#	1.0uØ	DM	TO39	AØ
40#	BUX53T	57m	10	SJ	3.0	600m	425	7.0	325	500uΔ	4.0	750m	20 #	60 #	8.0MΔ	666m#	1.0uØ	DM	TO39	AØ
41#	BUX54T	57m	10	SJ	2.0	400m	450	7.0	400	500uΔ	4.0	600m	20 #	60 #	8.0MΔ	1.0 #	1.0uØ	DM	TO39	AØ
42#	BUX55T	57m	10	SJ	1.5	300m	500	7.0	500	500uΔ	4.0	400m	20 #	60 #	8.0MΔ	1.6 #	350nØ	DM	TO39	AØ
43	C2-8Z	57m	10	SJ	1.0			3.0	14						470M#		W54	R		
44	C3-12	57m	10	SJ	1.0			4.0	17						470M#		T91	R		
45	C3-28	57m	10	SJ	1.0	500m		4.0	33						400M#		T91	R		
46	D3-28	57m	10	SJ	500m			4.0	30						960M#		T93	R		
47	HEPS3010-RT	57m	10	SJ	4.0	1.0	70	5.0	60	100u#	2.0	4.0	20 #	100 #	30MΔ	250m	100nØ	TO39	A	
48	MRF231	57m	10	SS	1.0		36	4.0	18	500uØ	5.0	250m	5.0		90M#		T93b	XØ		
49	MRF476	57m	10	SS	1.0		36	4.0	18	500uØ	5.0	250m	10	50 Ø	30M#		Y220b	R		
50	PT3502	57m	10	SJ	750m		60	3.0	40	100uØ	2.0	50	15	100 #			T59	R		
51	PT3503	57m	10	SJ	750m		40	3.0	25	100uØ	12	50m	15	100 #			TO39	AØ		
52	RCA1A15	57m	10	SJ	1.0	500m		5.0	100	10uΔ	100	10m			15MΔ	100	F8	A		
53	SCA3523-2	57m	10	SJ	1.5		70	3.5	40	10u					100MΔ		T13	A		
54	SCA3523-3	57m	10	SJ	1.5		70	3.5	40	10u					100MΔ		F8	A		
55	SCA3523A2	57m	10	SJ	1.5		70	3.5	40	10u					100MΔ		T13	A		
56	SCA3523A3	57m	10	SJ	1.5		70	3.5	40	10u					100MΔ		T13	A		
57	SD1007	57m	10	J	800m		40	3.5	30	200uΔ	20	100m	30	300	1.2GΔ		EPL	TO117		
58	ST1105	57m#	2.0	SS	1.0	500m	100	6.0	100	3.0	100	75m	30	200	30m		D	F8		
59	ST1205	57m#	2.0	SS	1.0	500m	200	6.0	200	3.0	100	60m	30	200	30m		D	F8		
60	ST1305	57m#	2.0	SS	1.0	500m	300	6.0	300	3.0	100	55m	30	200	30m		D	F8		
61	ST1405	57m#	2.0	SS	1.0	500m	400	6.0	400	3.0	100	45m	30	200	30m		D	F8		
62	ST1505	57m#	2.0	SS	1.0	500m	500	6.0	500	3.0	100	35m	30	200	30m		D	F8		
63	ST1605	57m#	2.0	SS	1.0	500m	600	6.0	600	4.0	100	25m	30	200	30m		D	F8		
64	ST1705	57m#	2.0	SS	1.0	500m	700	6.0	700	4.0	100	20m	30	200	30m		D	F8	A	
65	ST1805	57m	2.0	S	1.0	500m	800	5.0	800	4.0	100	20m	30	200	30MΔ		D	F8	A	
66	ST1905	57m	2.0	S	1.0	500m	900	5.0	900	4.0	100	20m	30	200	30MΔ		D	F8	A	
67	ST11005	57m	2.0	S	1.0	500m	1.0k	5.0	1.0k	4.0	100	20m	30	200	30MΔ		D	F8	A	
68	TRL2005	57m	2.0	S	3.0	1.0	200	4.0	200	10u	100	500m	15	35 Ø	20MΔ		D	F8		
69	TRS25X	57m	10	SA	1.0	500m	300	12	250	100u	100	20m	1.6k	30k	50MΔ			TO5		
70	TRS30X	57m	10	SA	1.0	500m	400	12	300	100u	100	20m	2.5k	32k	50MΔ			TO5		
71	TRS35X	57m	10	SA	1.0	500m	450	12	350	100u	100	20m	1.8k	30k	50MΔ			TO5		
72	TRS3742	57m	2.0	S	1.0	500m	300	7.0	300	200n	10	30m	20	200	50M			F8		
73	TRS4926	57m	2.0	S	1.0	500m	200	7.0	200	100n	10	30m	20	200	50M			F8		
74	TRS4927	57m	2.0	S	1.0	500m	250	7.0	250	100n	10	30m	20	200	50M			F8		
75#	ZTB3-28ST	57m	10	SS	1.0		40	4.0	35	2.0m#		250m	15		500MΔ		A	T162	S	
76	2N6524	59m	10	SS	1.2		50	3.0	40	1.2m#	5.0	250m	15				W24	As		
77	2N6528	59m	10	SS	1.2		50	3.5	50	1.2m#	5.0	250m	15				W24	As		
78	2N5152	60m	1.0	SJ	2.0	1.0	100	6.0	80	1.0m#	5.0	2.5	30	90 #	60MΔ		TO39	AØ		
79	2N5154	60m	1.0	SJ	2.0	1.0	100	6.0	80	1.0m#	5.0	2.5	30	200 #	70MΔ		TO39	AØ		
80	K56105T	60m	10	SJ	1.5	300m	60	4.5	60	500u	5.0	1.0	20		400MΔ		PE	TO39		
81	K56106T	60m	10	SJ	1.5	300m	40	4.5	40	500u	5.0	1.0	20		400MΔ		PE	TO39		
82	K56107T	60m	10	SJ	2.0	500m	60	4.5	60	500u	5.0	1.0	15		200MΔ	</				