

# 11. SILICON NPN - HIGH POWER TRANSISTORS

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

LINE No.	TYPE No.	1 MIN DERATE J to C (W/C)	MAX Pc FREE AIR @ 25°C (W)	M T A E X M P	ABSOLUTE MAX. RATINGS @ 25°C						MAX. hFE				f <sub>ae</sub> (Hz)	MAX. SAT. RES. (Ω)	tr (s)	STRUC- TURE	DWG # Y200 s/a T0200 Ser.	L C O D E	
					I <sub>c</sub> (A)	I <sub>b</sub> (A)	BV <sub>cb0</sub> (V)	BV <sub>eb0</sub> (V)	BV <sub>ceo</sub> (V)	MAX. I <sub>c</sub> @ MAX V <sub>cb0</sub> @ 25°C		BIAS									
										I <sub>c</sub> (A)	I <sub>b</sub> (A)	V <sub>cb</sub>	I <sub>c</sub>	MIN							MAX
												(V)	(A)								
1	2N1480	28m	5.0	∅	∅	1.5	1.0	100	12	100 #	10u∅	4.0	200m	20	60	1.5M†		T05	A∅		
2	JAN2N1480	28m	1.0	∅	∅	1.5	1.0	100	12	55	5.0u†	4.0	200m	20	60	800k†Δ		T05	A∅		
3	2N1481	28m	5.0	∅	∅	1.5	1.0	60	12	60 #	10u∅†	4.0	200m	35	100	1.5M†		T05	A∅		
4	JAN2N1481	28m	1.0	∅	∅	1.5	1.0	60	12	40	5.0u∅†	4.0	200m	35	100	800k†Δ		T05	A∅		
5	2N1482	28m	5.0	∅	∅	1.5	1.0	100	12	100 #	10u∅†	4.0	200m	35	100	1.5M†		T05	A∅		
6	JAN2N1482	28m	1.0	∅	∅	1.5	1.0	100	12	55	5.0u∅†	4.0	200m	35	100	800k†Δ		T05	A∅		
7	2N1613A	28m	1.0	∅	∅	500m		75	50	7.0	2.0n∅	10∅	150m	40	120 #	60MΔ	150m#	T05	A∅		
8	2N1613B	28m	1.0	∅	∅	500m		120	7.0	50	2.0n∅	10∅	100u	20	40	60MΔ	1.3	T05	A∅		
9	2N1711A	28m	1.0	∅	∅	500m		75	50	7.0	2.0m∅	10∅	150m	100	300 #	70MΔ	150m#	T05	A∅		
10	2N1711B	28m	1.0	∅	∅	500m		75	50	7.0	2.0m∅	10∅	150m	100	300 #	70MΔ	150m#	T05	A∅		
11	2N2017	28m	1.0	∅	∅	1.0		120	7.0	50	2.0n∅	10∅	100u	20	40	60MΔ	1.3	T05	A∅		
12	2N2102	28m	1.0	∅	∅	1.0		120	7.0	65	2.0n∅	10∅	150m	40	120 #	60MΔ	3.3	T05	A∅		
13	2N2102A	28m	1.0	∅	∅	1.0		120	7.0	65	2.0n∅	10∅	150m	40	120 #	60MΔ	2.0	T05	A∅		
14	2N2102S	28m	1.0	∅	∅	1.0		120	7.0	65	2.0n∅	10∅	150m	40	120 #	60MΔ	3.3	T039	A∅		
15	2N2594	28m	1.0	∅	∅	1.0		80	7.0	80	100n∅	5.0∅	10	20	40	40MΔ	5.0	T05	A∅		
16	2N2726	28m	1.0	∅	∅	500m	250m	200	10	200 #	1.0u∅	10∅	200m	30	90 #	15MΔ		T05	A∅		
17	2N2727	28m	1.0	∅	∅	500m	250m	200	10	200 #	1.0u∅	10∅	200m	75	150 #	15MΔ		T05	A∅		
18	2N3053	28m	5.0	∅	∅	700m		60	5.0	40	50n∅	1.0∅	150m	50	250 #	100MΔ		T05	A∅		
19	2N3053A	28m	5.0	∅	∅	700m		60	5.0	40	50n∅	1.0∅	150m	25	250 #	100MΔ	2.0	T039	A∅		
20	2N3053S	28m	5.0	∅	∅	700m		60	5.0	40	50n∅	1.0∅	150m	50	250 #	100MΔ		T05	A∅		
21	2N32521	28m	1.0	∅	∅	1.0		60	5.0	30	50n∅	1.0∅	500m	30	90 #	200MΔ		T039	A∅		
22	2N32525†	28m	1.0	∅	∅	1.0		60	5.0	30	50n∅	1.0∅	500m	30	90 #	200MΔ		T05	A∅		
23	2N32531	28m	1.0	∅	∅	1.0		75	5.0	40	50n∅	1.0∅	375m	25	75 #	175MΔ		T05	A∅		
24	JAN2N3253†	28m	5.0	∅	∅	1.0		75	5.0	40	50n∅	1.0∅	500m	25	75 #	175MΔ	1.2	T05	A∅		
25	2N32535†	28m	1.0	∅	∅	1.0		75	5.0	40	50n∅	1.0∅	375m	25	75 #	175MΔ		T05	A∅		
26	JAN2N3253St	28m	5.0	∅	∅	1.0		75	5.0	40	50n∅	1.0∅	500m	25	75 #	175MΔ	1.2	T05	A∅		
27	2N3309A*	28m	5.0	∅	∅	500m		60	4.0	60	50n∅	2.0∅	75m	5.0	100	300MΔ	2.0	T05	A∅		
28	2N3374*	28m	5.0	∅	∅	500m	200m	80	4.0	80	50n∅	2.0∅	170m	10 #	10	230MΔ	2.0	T05	A∅		
29	2N3439S	28m	1.0	∅	∅	1.0		450	7.0	350	20u∅	10∅	20m	40	180	15MΔ	10	T039	A∅		
30	2N3440S	28m	1.0	∅	∅	1.0		300	7.0	250	20u∅	10∅	20m	40	180	15MΔ	10	T039	A∅		
31	JAN2N3444†	28m	5.0	∅	∅	1.0		80	5.0	50	50n∅	1.0∅	500m	20	60	175MΔ	1.2	T05	A∅		
32	JAN2N3444St	28m	5.0	∅	∅	1.0		80	5.0	50	50n∅	1.0∅	500m	20	60	175MΔ	1.2	T05	A∅		
33	2N3464	28m	5.0	∅	∅	5.0	2.0	60	5.0	40	100u∅	4.0∅	200m	35	100 #	30MΔ		T05	A∅		
34	JAN2N3498†	28m	1.0	∅	∅	500m		100	6.0	100	50n∅	1.0∅	150m	40	120 #	150MΔ		T05	A∅		
35	JAN2N3499†	28m	1.0	∅	∅	500m		100	6.0	100	50n∅	1.0∅	150m	40	120 #	150MΔ		T05	A∅		
36	JAN2N3500†	28m	1.0	∅	∅	300m		150	6.0	150	50n∅	1.0∅	150m	40	120 #	150MΔ		T05	A∅		
37	JAN2N3501†	28m	1.0	∅	∅	300m		150	6.0	150	50n∅	1.0∅	150m	100	300 #	150MΔ		T05	A∅		
38	JAN2N3506†	28m	1.0	∅	∅	3.0		60	5.0	40	1.0u∅	2.0∅	1.5	40	200 #	60MΔ	45n∅	T05	A∅		
39	JAN2N3507†	28m	1.0	∅	∅	3.0		60	5.0	40	1.0u∅	2.0∅	1.5	40	200 #	60MΔ	45n∅	T05	A∅		
40	2N3664	28m	5.0	∅	∅	500m	100m	80	4.0	60	50n∅	2.0∅	50m	8.0	80	300MΔ	3.0	T05	A∅		
41	2N3665	28m	5.0	∅	∅	1.0		120	8.0	80	50n∅	1.0∅	150m	40	120	60MΔ		T05	A∅		
42	2N3666	28m	5.0	∅	∅	1.0		120	8.0	80	50n∅	1.0∅	150m	100	300	60MΔ		T05	A∅		
43	2N3724A†	28m	1.0	∅	∅	1.2		80	6.0	30	50n∅	1.0∅	100m	60	150 #	300MΔ		T039	A∅		
44	2N3725A†	28m	1.0	∅	∅	1.2		80	6.0	30	50n∅	1.0∅	100m	60	150 #	300MΔ		T039	A∅		
45	2N3742	28m	1.0	∅	∅	50m		300	7.0	300	200n∅	10∅	30m	20	200	30MΔ	75	T05	A∅		
46	2N3742S	28m	1.0	∅	∅	50m		300	7.0	300	200n∅	10∅	30m	20	200	30MΔ	75	T039	A∅		
47	2N3866	28m	5.0	∅	∅	0.4	0.4	55	3.5	30	20uΔ	5.0∅	50m	10	200	500MΔ	10	T039	A∅		
48	JAN2N3866	28m	1.0	∅	∅	400m		55	3.5	30	20uΔ	5.0∅	50m	15	200	500MΔ	10	T039	A∅		
49	2N3866A	28m	5.0	∅	∅	400m		55	3.5	30	100u#	5.0∅	50m	25	200	800MΔ	10	T039	A∅		
50	JAN2N3866A	28m	1.0	∅	∅	400m		80	3.5	30	20uΔ	5.0∅	50m	25	200	800MΔ	10	T039	A∅		
51	2N3945	28m	5.0	∅	∅	1.0		70	8.0	50	100n∅	1.0∅	150m	40	150	60MΔ	3.3	T05	A∅		
52	2N3948	28m	5.0	∅	∅	400m		38	3.5	20	100n∅	5.0∅	50m	15	200	700MΔ		T039	A∅		
53	2N4924	28m	1.0	∅	∅	200m		100	5.0	100	100n∅	10∅	150m	40	200 #	100MΔ		T039	A∅		
54	2N4925	28m	1.0	∅	∅	200m		150	5.0	150	100n∅	10∅	150m	40	200 #	100MΔ		T039	A∅		
55	2N4926	28m	5.0	∅	∅	50m		200	7.0	200	100n∅	10∅	30m	20	200 #	30MΔ		T039	A∅		
56	2N4927	28m	5.0	∅	∅	50m		250	7.0	250	100n∅	10∅	30m	20	200 #	30MΔ		T039	A∅		
57	2N4976	28m	5.0	∅	∅	400m	150m	55	3.5	30	5.0m#	5.0∅	50m	20	250	1.0MΔ		T66			
58	JAN2N5109	28m	1.0	∅	∅	1.0		40	3.0	20	20uΔ	15∅	50m	40	150 #	1.2GΔ		T039	A∅		
59	2N5279	28m	1.0	∅	∅	1.0		40	3.0	20	20uΔ	15∅	50m	40	150 #	1.5MΔ		T05	A∅		
60	2N5422	28m	5.0	∅	∅	500m		36	4.0	18	100u∅	5.0∅	500m	10	60	300MΔ	1.0	T039	A∅		
61	2N5481	28m	5.0	∅	∅	200m	50m	50	3.0	30	2.0m	5.0∅	50m	20	250			T74	R		
62	2N5527S	28m	5.0	∅	∅	5.0		60	3.0	40	1.0m	5.0∅	3.0	40	200 #	200MΔ	3.7	R179u	A∅		
63	2N5531S	28m	5.0	∅	∅	5.0		90	3.0	75	1.0m	5.0∅	3.0	30	150 #	200MΔ	3.7	R179u	A∅		
64	2N5535S	28m	5.0	∅	∅	20		8.0	6.0	3.0	1.0m	5.0∅	10	30	150 #	150MΔ	6.2	T061	A		
65	2N5536S	28m	5.0	∅	∅	20		8.0	6.0	3.0	1.0m	5.0∅	10	30	150 #	150MΔ	6.2	T061	A		
66	2N5537S	28m	5.0	∅	∅	20		8.0	6.0	3.0	1.0m	5.0∅	10	30	150 #	150MΔ	6.2	T061	A		
67	2N5538S	28m	5.0	∅	∅	20		8.0	6.0	3.0	1.0m	5.0∅	10	30	150 #	150MΔ	6.2	T061	A		
68	2N5687	28m	5.0	∅	∅	500m		40	3.0	20	1.0mΔ	12∅	50m	15				T039	R		
69	2N5698	28m	5.0	∅	∅	500m		40	3.0	18	1.0mΔ	12∅	40m	30				T0131	R		
70	2N5766	28m	5.0	∅	∅	200m	40m	55	3.5	25	3.0m∅	5.0∅	50m	20				T77	Z		
71	2N5859†	28m	1.0	∅	∅	2.0		80	6.0	40	250n∅	1.0∅	1.0	15	100	250MΔ	700m	30n∅	T039	A∅	
72	2N5860	28m	1.0	∅	∅	2.0		90	7.0	45	250n∅	1.0∅	500m	35	100</						