

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. Vc @ 25°C			BIAS hFE		MIN	MAX	fae (Hz)	MAX. SAT. RES. (Ω)	tr (s)	STRUC-TURE	DWG # Y200 s/a TO200 Ser.	# L C O A D E
					Ic (A)	Ib (A)	BVcbo (V)	BVebo (V)	BVceo (V)	Icbo (A)	Vcbo (V)	Vcb (V)	Ic (A)	MIN								
1#	2SD356	80m	10	∅	\$J	800m		90	5.0	80	1.0∅	4.0∅	300m	55	300 #	70Ms				PE1		
2#	2SD357	80m	10	∅	\$J	800m		110	5.0	100	1.0∅	4.0∅	300m	55	300 #	70Ms				PE1		
3#	2SD358	80m	10	∅	\$J	800m		130	5.0	120	1.0∅	4.0∅	300m	55	300 #	70Ms				PE1		
4#	2SD359	80m	10	∅	\$J	800m		40	5.0	20	1.0∅	4.0∅	500m	55	300 #	70Ms				PE1		
5#	2SD360	80m	10	∅	\$J	800m		40	5.0	20	1.0∅	4.0∅	500m	55	300 #	70Ms				PE1		
6#	2SD361	80m	10	∅	\$J	1.5		60	5.0	40	1.0∅	4.0∅	500m	55	180 #	70Ms				PE1		
7#	2SD414	80m	10	∅	\$J	800m		120	5.0	80	1.0∅	5.0∅	200m	40 #	250 #	80Ms	4.0 #			ET	B16m	B∅
8#	2SD415	80m	10	∅	\$J	800m		120	5.0	100	1.0∅	5.0∅	200m	40 #	250 #	80Ms	4.0 #			ET	B16m	B∅
9#	2SD593	80m	10	∅	\$J	300m		500	6.0	400	100u	4.0∅	50m	30	200 #				DM	T05	A∅	
10#	2SD594	80m	10	∅	\$J	300m		800	6.0	700	100u	4.0∅	50m	30	200 #				DM	T05	A∅	
11#	2SD794	08	10	∅	\$J	3.0	60	70	5.0	45	1.0u	5.0∅	50	60	320 #	60Ms			E	B16m	B∅	
12#	2SD794A	08	10	∅	\$J	3.0	60	70	5.0	60	1.0u	5.0∅	50	60	320 #	60Ms			E	B16m	B∅	
13#	2SD809	80m	10	∅	\$J	1.0	500m	100	6.0	50	100n	2.0∅	100m	135	600 #	85Ms						
14#	2SD882	08	10	∅	\$J	3.0	60	40	5.0	30	1.0u	2.0∅	1.0	60	400 #	90			E	B16m	B∅	
15#	2SD9851	08	10	∅	\$J	1.5	.15	150	8.0	60	1.0u	2.0∅	1.0	8.0k #	30k*							
16#	2SD9861	08	10	∅	\$J	1.5	.15	150	8.0	60	1.0u	2.0∅	1.0	8.0k #	30k							
17#	BD115	80m #	6.0	∅ #	\$J	150m		245	5.0	180	550u\$†	100∅	50m	22	60 ∅	145Ms	90m		PL	T039	A∅	
18	BD505	80m	1.0		\$J	2.0		30	5.0	20	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18b	A∅	
19	BD505-1	80m	1.0		\$J	2.0		30	5.0	20	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18d	A∅	
20	BD505-5	80m	1.0		\$J	2.0		30	5.0	20	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18c	A∅	
21	BD507	80m	1.0		\$J	2.0		40	5.0	30	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18b	A∅	
22	BD507-1	80m	1.0		\$J	2.0		40	5.0	30	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18d	A∅	
23	BD507-5	80m	1.0		\$J	2.0		40	5.0	30	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18c	A∅	
24	BD509	80m	1.0		\$J	2.0		50	5.0	40	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18b	A∅	
25	BD509-1	80m	1.0		\$J	2.0		50	5.0	40	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18d	A∅	
26	BD509-5	80m	1.0		\$J	2.0		50	5.0	40	100n∅	2.0∅	1.0	40	90 #	250Ms	700m #		AN	B18c	A∅	
27	BD515	80m	1.0		\$J	2.0		45	4.0	45	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18b	A∅	
28	BD515-1	80m	1.0		\$J	2.0		45	4.0	45	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18d	A∅	
29	BD515-5	80m	1.0		\$J	2.0		45	4.0	45	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18c	A∅	
30	BD517	80m	1.0		\$J	2.0		60	4.0	60	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18b	A∅	
31	BD517-1	80m	1.0		\$J	2.0		60	4.0	60	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18d	A∅	
32	BD517-5	80m	1.0		\$J	2.0		60	4.0	60	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18c	A∅	
33	BD519	80m	1.0		\$J	2.0		80	4.0	80	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18b	A∅	
34	BD519-1	80m	1.0		\$J	2.0		80	4.0	80	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18d	A∅	
35	BD519-5	80m	1.0		\$J	2.0		80	4.0	80	100n∅	2.0∅	150m	60	350 #	160Ms	1.0 #		AN	B18c	A∅	
36	BD525	80m	1.0		\$J	2.0		60	4.0	60	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18b	A∅	
37	BD525-1	80m	1.0		\$J	2.0		60	4.0	60	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18d	A∅	
38	BD525-5	80m	1.0		\$J	2.0		60	4.0	60	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18c	A∅	
39	BD527	80m	1.0		\$J	2.0		80	4.0	80	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18b	A∅	
40	BD527-1	80m	1.0		\$J	2.0		80	4.0	80	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18d	A∅	
41	BD527-5	80m	1.0		\$J	2.0		80	4.0	80	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18c	A∅	
42	BD529	80m	1.0		\$J	2.0		100	4.0	100	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18b	A∅	
43	BD529-1	80m	1.0		\$J	2.0		100	4.0	100	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18d	A∅	
44	BD529-5	80m	1.0		\$J	2.0		100	4.0	100	100n∅	2.0∅	50m	60	115 #	150Ms	2.0 #		AN	B18c	A∅	
45	BF380	80m	1.0		\$J	500m		180	5.0	180	50n	10∅	30m	25		90Ms	25		AN	B18b	A∅	
46	BF380-1	80m	1.0		\$J	500m		180	5.0	180	50n	10∅	30m	25		90Ms	25		AN	B18d	A∅	
47	BF380-5	80m	1.0		\$J	500m		180	5.0	180	50n	10∅	30m	25		90Ms	25		AN	B18c	A∅	
48	BF381	80m	1.0		\$J	500m		250	5.0	250	50n	10∅	30m	25		90Ms	25		AN	B18b	A∅	
49	BF381-1	80m	1.0		\$J	500m		250	5.0	250	50n	10∅	30m	25		90Ms	25		AN	B18d	A∅	
50	BF381-5	80m	1.0		\$J	500m		250	5.0	250	50n	10∅	30m	25		90Ms	25		AN	B18c	A∅	
51	BF382	80m	1.0		\$J	500m		300	5.0	300	50n	10∅	30m	25		90Ms	25		AN	B18b	A∅	
52	BF382-1	80m	1.0		\$J	500m		300	5.0	300	50n	10∅	30m	25		90Ms	25		AN	B18d	A∅	
53	BF382-5	80m	1.0		\$J	500m		300	5.0	300	50n	10∅	30m	25		90Ms	25		AN	B18c	A∅	
54#	BF615	80m	2.0		\$J	300m #		250	5.0	250	50n	15∅	25m	30		70Ms			PE	Y202b	B	
55#	BF617	80m	2.0		\$J	300m #		300	5.0	300	50n	15∅	25m	30		70Ms			PE	Y202b	B	
56#	BF757	08	10		\$J	50		250	6.0	250	20u	10∅	30m	40	180	45MsΔ			D	B68	B	
57#	BF758	08	10		\$J	50		300	6.0	300	20u	10∅	30m	40	180	45MsΔ			D	B68	B	
58#	BF759	08	10		\$J	50		350	6.0	350	20u	10∅	30m	40	180	45MsΔ			D	B68	B	
59#	BLY85	80m	10	∅	\$J	1.0		50	4.0	20	5.0m	5.0∅	200m	10		250MsΔ			PL	T89	S	
60#	BLY97	80m	10	∅	\$J	1.0		50	4.0	33	5.0m	5.0∅	200m	10		250MsΔ			PL	T89	S	
61	HEPS3020-RT	80m	10	∅	\$J	2.0		60	4.0	60	100n∅	2.0∅	250	100 ∅		150MsΔ					B18	A
62	HEPS3021-RT	80m	10	∅	\$J	500m		300	8.0	300	200n∅	10∅	100	100		60MsΔ					B18	A
63	HEPS3047-RT	80m	10	∅	\$J	1.0		60	5.0	60	100n∅	50m	180	∅		180Ms					B42	P
64	HEPS3048-RT	80m	10	∅	\$J	500m		300	6.0	300	200n∅	30m	110	∅		120Ms					B42	P
65	HEPS3049-RT	80m	10	∅	\$J	500m		250	6.0	250	200n∅	30m	110	∅		120Ms					B42	P
66	HEPS3051-RT	80m	10	∅	\$J	500m		200	5.0	200	100n∅	10m	150	∅		100Ms					B42	P
67	HEPS5011-RT	80m	10	∅	\$J	500m		300	6.0	300	100u	50m	115	∅		10MsΔ					T066	C∅
68	KSE1091	80m			\$J	2.0	500m	80	4.5	80	500u	5.0	1.0	15		400M1			PE	T060		
69	KSE1101	80m			\$J	2.0	500m	40	4.5	40	500u	5.0	1.0	15		350M1			PE	T060		
70	KSE1111	80m			\$J	2.0	500m	80	4.5	80	500u	5.0	1.0	15		400M1			PE	T060		
71	KSE1121	80m			\$J	2.0	500m	40	4.5	40	500u	5.0	1.0	15		350M1			PE	T060		
72	MDS20	80m	10	∅	\$J	500m	250m	250	8.0	250												