

12. SWITCHING TRANSISTORS

IN ORDER OF (1) MAX RISE TIME, (2) fab & (3) TYPE No.

LINE No.	TYPE No.	fab	MAX RISE TIME tr (s)	MAX DELAY TIME td (s)	MAX STORE TIME ts (s)	MAX FALL TIME tf (s)	MAX. P _c IN FREE AIR @ 25°C (W)	BIAS			MAX. SAT. RES. (Ω)	Cob (F)	r _{bb} X Cob (s)	STRUCTURE P-NPN N-NPN	M A T	MAX. TEMP (°C)	DWG # Y200 s/a TO200 Ser.	L C O D E
								V _{cb} (V)	I _e (A)	hFE								
1#	BSS87R#	300MΔ	35n	35n	200n	50n	200m	1.0	50m	80 Δ	4.0p		N	Si	175J	X136a	B	
2#	EN3904	300MΔ	35n	35n	200n	50n	700m	1.0	1.0m	100 Δ #	4.0p		N-DPE	Si	175J	TO106	A	
3#	FMMT3904	300MΔ	35n	35n	200n	50n	200m	1.0	1.0m	70 Δ #	4.0p		N-DPE	Si	175A	X156a	A	
4#	GES222A	300MΔ	35n				285m	1.0	1.0	150m	300 Δ #	2.0 #	N-PE	Si	150S	TO122	A	
5#	LDS203	300MΔ	35n	35n	200n	50n	380m	1.0	1.0m	80 Δ #	6.0p		PE	Si	200J	TO52	A	
6#	MM3904	300MΔ	35n	35n	200n	50n	360m	1.0	1.0m	70 Δ #	5.0p		N-ANT	Si	150J	TO18	A	
7#	MPS3725	300MΔ	35n				60n	1.5	100m	80 Δ #	1.0p		N	Si	150J	TO18	A	
8#	NS3904	300MΔ	35n	35n	200n	50n	360m	1.0	1.0m	100 Δ	4.0p		N	Si	150J	TO18	A	
9#	NTM3904	300MΔ	35n				200m	1.0	1.0m	100 Δ	4.0		N	Si	150J	X156b	A	
10#	PN3251	300MΔ	35n	35n	200n	50n	625m	1.0	1.0m	300 Δ #	6.0p		P-DPE	Si	150J	TO82	A	
11#	PN3251A	300MΔ	35n	35n	200n	50n	500m	1.0	1.0m	300 Δ #	6.0p		NDPE	Si	150J	TO92	A	
12#	PN3947	300MΔ	35n	35n	200n	50n	500m	1.0	1.0m	300 Δ #	4.0p		NDPE	Si	150J	TO92	A	
13#	ZTX3904	300MΔ	35n	35n	200n	50n	500m	1.0	1.0m	100 Δ #	4.0p		N-PLT	Si	175J	B58	A	
14#	2N1204	320M	35n				200m	1.5	400m	15 Δ #	2.5		P-AD	Ge	100S	TO39	A	
15#	2N1494	320M	35n				400m	1.5	400m	15 Δ #	2.5		P-AD	Ge	100S	TO31	A	
16#	2N83	350MΔ	35n	25n			75n	3.0	1.0	25 Δ	4.0p		N	Si	175J	TO18	A	
17#	2N4349	350MΔ	35n	20n	125n		75n	1.0	1.0	25 Δ	4.0p		N	Si	200	TO5	A	
18#	40220	350MΔ	35n	20n			70n	1.0	1.0	25 Δ	500m		N	Si	175	TO52	A	
19#	2N6013	360MΔ	35n	10n	450n		75n	1.0	1.0	250 Δ	8.0		P	Si	150J	R203a	A	
20#	2N6017	360MΔ	35n	10n	450n		75n	1.0	1.0	250 Δ	8.0		P	Si	150J	R203a	A	
21#	2SA153	400M	35n	10n	225n		225n	2.0	5.0	50	5.0p		PE	Si	150J	TO92	A	
22#	2SC2720	400M	35n	225n	275n		600m	1.0	150m	150	3.5p		NE	Si	150J	TO93	B	
23#	BSS226	400M	35n	60n			360m	1.0	100u	40	4.8p		N	Si	200J	TO18	A	
24#	BSY77	400M	35n	60n			800m	1.0	100m	60	4.8p		N	PE	200J	TO39	A	
25#	BSV95	400M	35n	60n			800m	1.0	500m	20 Δ	4.8p		N	PE	200J	TO39	A	
26#	BSY58	400M	35n	60n			800m	1.0	100m	42 t	4.5p		N-DPE	Si	200J	TO39	A	
27#	MM3734	400M	35n	60n			60n	2.6	1.5	35	15p		N-AN	Si	200J	TO39	A	
28#	MM3735	400M	35n	60n			60n	4.0	1.0	35	15p		N-AN	Si	200J	TO39	A	
29#	BSX59	475M	35n	60n			800m	1.0	150m	70 Δ	2.0		N-PE	Si	200J	TO5	A	
30#	JAN2N3253	500M	35n	15n	40n		30n	5.0	1.0	20 Δ	1.2		N-E	Si	200S	TO5	A	
31#	JAN2N3253S	500M	35n	15n	40n		30n	1.0	5.0	1.0	1.2		N-E	Si	200S	TO5	A	
32#	JAN2N3444	500M	35n	15n	40n		30n	5.0	1.0	15 Δ	1.2		N-E	Si	200S	TO5	A	
33#	JAN2N3444S	500M	35n	15n	40n		30n	1.0	5.0	1.0	1.2		N-E	Si	200S	TO5	A	
34#	2N285	600M	35n	25n	75n		360m	1.0	10m	50	2.6p		N-PE	Si	300	TO18	A	
35#	JAN2N3762	600M	35n	8.0n	80n		1.0	1.0	10m	35 Δ	1.0 #		P	Si	200J	TO5	A	
36#	JAN2N3763	600M	35n	8.0n	80n		1.0	1.0	10m	35 Δ	1.0 #		P	Si	200J	TO5	A	
37#	JAN2N3764	600M	35n	8.0n	80n		500m	1.0	10m	35 Δ	1.0 #		P	Si	200J	TO46	A	
38#	JAN2N3765	600M	35n	8.0n	80n		500m	1.0	10m	35 Δ	1.0 #		P	Si	200J	TO46	A	
39#	JAN2N3250A	900M	35n	35n	175n		50n	1.2	10m	50 Δ #	25		P	Si	200S	TO18	A	
40#	JAN2N3250A	900M	35n	35n	200n		50n	1.2	10m	100 Δ #	25		P	Si	200S	TO18	A	
41#	2N5413	250MΔ	37n	5.0n	50n		35n	5.0	50m	30 Δ #	16p		N	Si	200S	TO39	A	
42#	2N5413	250MΔ	37n	5.0n	60n		35n	5.0	50m	30 Δ #	16p		N	Si	200S	TO39	A	
43#	2N3862	600MΔ	37n	39n	25n		25n	360m	1.0	10m	50 Δ #	25		N	Si	200A	TO18	A
44#	2N3972		40n	40n	100n		8.0				100		N	Si	200S	TO18	DB	
45#	JAN2N4093		40n				80n	360m			16p		N	Si	175A	TO18	DB	
46#	2N4093A		40n	20n			80n	1.8			80		N	Si	200S	TO18	DB	
47#	2N5189		40n				70n	1.0	1.0	15 Δ	1.0		N	Si	200S	R179q	A	
48#	2SC1072		40n				50n	60n	800m	1.0	500m	35 Δ	N-PE	Si	175J	R179n	A	
49#	2SC1072A		40n				50n	60n	800m	1.0	500m	35 Δ	N-PE	Si	175J	R179n	A	
50#	2SC1385H		40n				60n	800m	1.2	500m	20 Δ	3.0p	N-PE	Si	175J	TO39	A	
51#	3N177		40n	35n	60n		150n	225m			500	7.0p	NMOS	Si	200S	TO72	DR	
52#	3N183		40n	40n	160n		180n	500m			75	3.0p	PMOS	Si	200S	TO72	DM	
53#	BFV51		40n	40n	160n		50n	150m	10	500m	20 Δ	3.3	NPE	Si	200J	S5a	P	
54#	BFV53		40n	40n	160n		50n	150m	10	500m	20 Δ	3.3	NPE	Si	200J	S5a	P	
55#	BFX30		40n	15n	250n		50n	600m	4	-10m	50 Δ	8.0p	P-PE	Si	200J	TO39	A	
56#	J4093		40n	20n	80n		350m	8.0			80		N	Si	150S	TO92	DE	
57#	MFE2004		40n	20n			80n	8.0			16p		N	Si	175J	TO18	DB	
58#	MPS3644K		40n				100n	1.2	10	100u	170	5.0 #	PPL	Si	175A	X167	A	
59#	MPS3644L		40n				100n	1.2	10	100u	170	5.0 #	PPL	Si	175A	X168	A	
60#	MPS3644M		40n				100n	1.2	10	100u	170	5.0 #	PPL	Si	175A	X169	A	
61#	MPS3645K		40n				100n	1.2	10	100u	170	5.0 #	PPL	Si	175A	X167	A	
62#	MPS3645L		40n				100n	1.2	10	100u	170	5.0 #	PPL	Si	175A	X168	A	
63#	MPS3645M		40n				100n	1.2	10	100u	170	5.0 #	PPL	Si	175A	X169	A	
64#	U1899E		40n	20n			80n	350m			80	16p	N	Si	125J	R97b	DB	
65#	BFX84	50MΔ	40n	15n	300n		80n	800m	10	150m	30 Δ		N-PE	Si	200J	TO39	A	
66#	BFX85	50MΔ	40n	15n	300n		80n	800m	10	150m	70 Δ		N-PE	Si	200J	TO39	A	
67#	BFX86	50MΔ	40n	15n	300n		80n	800m	10	150m	70 Δ		N-PE	Si	200J	TO39	A	
68#	BFY51	50.0MΔ	40n	15n	300n		80n	5.0	10	10m	85	1.6	N-PE	Si	200J	TO5	A	
69#	BFY52	50.0MΔ	40n	15n	300n		80n	5.0	10	10m	90	1.6	N-PE	Si	200J	TO5	A	
70#	2SC849	60.0M	40n	500n	60n		500m	4.0	10m	160			N	Si	175J	TO18	A	
71#	BFY50	60.0MΔ	40n	15n	300n		60n	5.0	10	10m	80	1.0	N-PE	Si	200J	TO5	A	
72#	2N771	100MΔ	40n	25n	40n		150m	1.0	20m	30 Δ	2.5	3.5p	N	Si	150S	TO18	A	
73#	2N1663	100MΔ	40n	25n	40n		150m	1.0	20m	150	2.5	3.5p	N	Si	150S	TO9	A	
74#	2N3883	100MΔ	40n	15n	70n		40n	300m	1.0	200m	30 Δ	2.5	P	Si	100S	TO5	A	
75#	2SC366G	100MΔ	40n	15n	250n		30n	400m	1.0	100m	240	5.0	N-E	Si	125J	TO92	B	
76#	BCX26	100MΔ	40n	20n	450n		100n	1.0	50	10m	160	2.5 #	PAN	Si	150J	R210a	F	
77#	BCX28	100MΔ	40n	20n	450n		100n	1.0	50	10m	160	2.5 #	PAN	Si	150J	R210a	F	
78#	BCX30	100MΔ	40n	20n	450n		100n	1.0	50	10m	160	2.5 #	PAN	Si	150J	R210a	F	
79#	BSS42	100M	40n				700n	5.0	5.0	1.0	45	10p	N-PE	Si	200J	TO39	A	
80#	BSX36	100MΔ	40n				100n	1.2	10	10m	40 Δ #	6.0	PAN	Si	200J	TO18	A	
81#	XGS7001	120MΔ	40n				100n	5.0	2.0	2.0	20 Δ #	1.0 #	N	Si	200J	TO39	A	
82#	XGS7002	120MΔ	40n				100n	5.0	2.0	2.0	15 Δ #	1.0 #	N	Si	200J	TO39	A	
83#	2N3072	130MΔ	40n		100n		3.0	1.0	1.0	50m	30 #	5.0	P	Si	200J	TO5	A	
84#	2N3073	130MΔ	40n		100n		3.0	1.0	1.0	50m	30 #	5.0	P	Si	200J	TO18	A	
85#	2N3120	130MΔ	40n		100n		1.0	1.0	1.0	50m	30 #	5.0	P	Si	200J	TO5	A	
86#	2N3121	130MΔ	40n		100n		1.0	1.0	1.0	50m	30 #	5.0	P	Si	200J	TO18	A	
87#	ZTX750	140M																