

# 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 <sub>c</sub> IN AIR @ 25°C (W)	BIAS			MAX. SAT. RES. (Ω)	Cob (F)	r <sub>bb</sub> X Cob (s)	STRUCTURE P-PNP N-NPN	M A T	MAX. TEMP (°C)	DWG # s/a TO200 Ser.	L C O D E
								V <sub>cb</sub> (V)	I <sub>e</sub> (A)	hFE								
1	PA7014	50MΔ	300nt	100nt	600nt	500nt	5.0 ∅	2.0 ∅	1.0 ∅	2.0kΔ #	440m #	100p□	N	Si	200S	T05	A∅	
2	PL7017	50MΔ	300nt	100nt	600nt	500nt	25 ∅	2.0 ∅	1.0 ∅	2.0kΔ #	440m #	100p□	N	Si	200S	F24	CD∅	
3	PL7018	50MΔ	300nt	100nt	600nt	500nt	25 ∅	2.0 ∅	1.0 ∅	2.0kΔ #	440m #	100p□	N	Si	200S	F24	CD∅	
4	SP44H1	50MΔ	300n∅		500n	140n	50 ∅	1.0 ∅	4.0 ∅	20 Δ	125m		N-PL	Si	150J	Y220b	D	
5	SP44H2	50MΔ	300n∅		500n	140n	50 ∅	1.0 ∅	4.0 ∅	20 Δ	125m		N-PL	Si	150J	Y220b	D	
6	SP44H4	50MΔ	300n∅		500n	140n	50 ∅	1.0 ∅	4.0 ∅	20 Δ	125m		N-PL	Si	150J	Y220b	D	
7	SP44H5	50MΔ	300n∅		500n	140n	50 ∅	1.0 ∅	4.0 ∅	20 Δ	125m		N-PL	Si	150J	Y220b	D	
8	SP44H7	50MΔ	300n∅		500n	140n	50 ∅	1.0 ∅	4.0 ∅	20 Δ	125m		N-PL	Si	150J	Y220b	D	
9	SP44H8	50MΔ	300n∅		500n	140n	50 ∅	1.0 ∅	4.0 ∅	20 Δ	125m		N-PL	Si	150J	Y220b	D	
10	SP44H10	50MΔ	300n∅		500n	140n	50 ∅	1.0 ∅	4.0 ∅	20 Δ	125m		N-PL	Si	150J	Y220b	D	
11	SP44H11	50MΔ	300n∅		500n	140n	50 ∅	1.0 ∅	4.0 ∅	20 Δ	125m		N-PL	Si	150J	Y220b	D	
12	U2T101	50MΔ	300nt	100nt	600nt	500nt	1.0	5.0 ∅	5.0 ∅	2.0kΔ #	300m #	100p□	N-PL	Si	200A	T033	KD	
13	U2T201	50MΔ	300nt	100nt	600nt	500nt	2.5	5.0 ∅	5.0 ∅	2.0kΔ #	300m #	100p□	N-PL	Si	200A	F24	KH	
14	U2T305	50MΔ	300nt	100nt	800nt	300nt	1.0	5.0 ∅	5.0 ∅	1.2 #	60p□	60p□	N-PL	Si	200A	T033	KD	
15	U2T405	50MΔ	300nt	100nt	800nt	300nt	2.0	5.0 ∅	5.0 ∅	1.2 #	60p□	60p□	N-PL	Si	200A	F24	KH	
16	UPT1131	60MΔ	300nt∅		600nt∅	3.5	7.7 *	2.0 ∅	2.0 ∅	15 Δ #	75m #	50p□	N-PL	Si	200J	T03	C∅	
17	UPT1132	60MΔ	300nt∅		600nt∅	3.5	5.0	2.0 ∅	2.0 ∅	15 Δ #	75m #	50p□	N-PL	Si	200J	T03	C∅	
18	UPT1133	60MΔ	300nt∅		600nt∅	3.5	5.0	2.0 ∅	2.0 ∅	15 Δ #	75m #	50p□	N-PL	Si	200J	T03	C∅	
19	UPT1134	60MΔ	300nt∅		600nt∅	3.5	5.0	2.0 ∅	2.0 ∅	15 Δ #	75m #	50p□	N-PL	Si	200J	T03	C∅	
20	UPT1135	60MΔ	300nt∅		600nt∅	3.5	5.0	2.0 ∅	2.0 ∅	15 Δ #	75m #	50p□	N-PL	Si	200J	T03	C∅	
21	2N6669	70MΔ	300n	50n	500n	500n	4.0 ∅	2.0 ∅	5.0 ∅	20 Δ	200m	150p□	N	Si	150S	Y220b	D	
22 #	BSX63	70MΔ	300n∅		1.5u∅	7.7 *	1.0	2.0 ∅	1.0 ∅	160 *			N-PE	Si	200J	T039	A∅	
23 #	BSX63-6	70MΔ	300n∅		1.5u∅	5.0	60	2.0 ∅	3.0 ∅	40 Δ			N-PE	Si	200A	T039	A∅	
24	2N4896	80MΔ	300n	50n	350n	300n	4.0 ∅	2.0 ∅	2.0 ∅	300	200m	80p□	N	Si	200J	T039	C	
25	2N5084	80.0MΔ	300n	50n	350n	300n	35m ∅	2.0 ∅	2.0 ∅	100 # Δ			N	Si	200J	T039	C	
26	2N6354	80MΔ	300n		1.0u	200n	80 ∅	2.0 ∅	5.0 ∅	20 Δ #			N	Si	200J	T03	C	
27 #	2SA429G	100MΔ	300nt∅		2.0u∅	400nt	400m	3.0 ∅	10m ∅	240		3.0p	P-PL	Si	125J	T092	B	
28 #	2SC780AG	100MΔ	300nt∅		2.0u	400nt	150m	3.0 ∅	10m ∅	240 *□	50	2.0p	N-E	Si	125J	R67a	B	
29	PT6947	100MΔ	300nt∅		1.0u∅	125 ∅	125 ∅	5.0 ∅	5.0 ∅	40 Δ		400p	N	Si	200A	T03	C∅	
30	PT6948	100MΔ	300nt∅		1.0u∅	125 ∅	125 ∅	5.0 ∅	5.0 ∅	40 Δ		400p	N	Si	200A	T03	C∅	
31	PT6949	100MΔ	300nt∅		1.0u∅	125 ∅	125 ∅	5.0 ∅	5.0 ∅	30 Δ		400p	N	Si	200A	T03	C∅	
32	PT7948	100MΔ	300nt∅		1.0u∅	175 ∅	175 ∅	5.0 ∅	5.0 ∅	20 Δ		400p	N	Si	200A	T063	C∅	
33	PT7950	100MΔ	300nt∅		1.0u∅	175 ∅	175 ∅	5.0 ∅	5.0 ∅	20 Δ		400p	N	Si	200A	T063	C∅	
34	JAN2N3996	120MΔ	300n∅		1.5u∅	30 ∅	30 ∅	2.0 ∅	50m ∅	30 Δ #		150p□	N	Si	200S	T53f	M	
35	JAN2N3997	120MΔ	300n∅		2.0u∅	30 ∅	30 ∅	2.0 ∅	50m ∅	60 Δ #		150p□	N	Si	200S	T53f	M	
36	JAN2N3998	120MΔ	300n∅		1.5u∅	30 ∅	30 ∅	2.0 ∅	50m ∅	30 Δ #		150p□	N	Si	200S	T42d	A	
37	JAN2N3999	120MΔ	300n∅		2.0u∅	30 ∅	30 ∅	2.0 ∅	50m ∅	60 Δ #		150p□	N	Si	200S	T42d	A	
38 #	2SA673AK	120MΔ	300nt∅	400nt	400n	400m	600m	3.0 ∅	10m ∅	60 Δ *	4.0		P-PE	Si	125J	S8	A	
39	2N3495	150MΔ	300n∅		1.0u∅	600m	600m	10	50m ∅	40 Δ #	35	6.0p□	P	Si	200S	T05	A∅	
40	2N3495S	150MΔ	300n∅		1.0u∅	600m	600m	10	50m ∅	40 Δ #	35	6.0p□	P	Si	200S	T039	A∅	
41	2N3497	150MΔ	300n∅		1.0u∅	400m	400m	10	50m ∅	40 Δ #	35	6.0p□	P	Si	200S	T018	A∅	
42 #	AST3497	150MΔ	300n∅		1.0u∅	625m	625m	10	10m ∅	40 Δ	35	6.0p□	P	Si	150S	R203	A	
43	JAN2N3418	160MΔ	300n∅		1.2u∅	15 ∅	15 ∅	5.0 ∅	5.0 ∅	10 Δ #		150p□	N	Si	200A	T05	A	
44	JAN2N3419	160MΔ	300n∅		1.2u∅	15 ∅	15 ∅	5.0 ∅	5.0 ∅	10 Δ #		150p□	N	Si	200A	T05	A	
45	JAN2N3420	160MΔ	300n∅		1.2u∅	15 ∅	15 ∅	5.0 ∅	5.0 ∅	15 Δ #		150p□	N	Si	200A	T05	A	
46	JAN2N3421	160MΔ	300n∅		1.2u∅	15 ∅	15 ∅	5.0 ∅	5.0 ∅	15 Δ #		150p□	N	Si	200A	T05	A	
47	2N3494	200MΔ	300n∅		1.0u∅	600m	600m	10	50m ∅	40 Δ #	30	7.0p□	P	Si	200S	T05	A∅	
48	2N3496	200MΔ	300n∅		1.0u∅	400m	400m	10	50m ∅	40 Δ #	30	7.0p□	P	Si	200S	T018	A∅	
49 #	AST3496	200MΔ	300n∅		1.0u∅	625m	625m	10	10m ∅	40 Δ	30	7.0p□	P	Si	150S	R203	A	
50	2N3946	250MΔ	300n	35n	300n	75n	360m	10	1.0m ∅	250 □	20	4.0p□	N	Si	200J	T018	A	
51	2N3947	300MΔ	300n	35n	375n	75n	360m	10	1.0m ∅	700 □	20	4.0p□	N	Si	200J	T018	A	
52 #	BUY82	60MΔ	320nt∅		245nt∅	245nt∅	15 ∅	5.0 ∅	10 ∅	30	100m	110p	N-PL	Si	175C	T039	A∅	
53	TIP75	10MΔ	340nt	20nt	1.4ut	800nt	2.0	4.0 ∅	3.0 ∅	10 Δ #	1.0 #	275p□	N-DM	Si	150J	Y220b	D	
54	TIP75A	10MΔ	340nt	20nt	1.4ut	800nt	2.0	4.0 ∅	3.0 ∅	10 Δ #	1.0 #	275p□	N-DM	Si	150J	Y220b	D	
55	TIP75B	10MΔ	340nt	20nt	1.4ut	800nt	2.0	4.0 ∅	3.0 ∅	10 Δ #	1.0 #	275p□	N-DM	Si	150J	Y220b	D	
56	TIP75C	10MΔ	340nt	20nt	1.4ut	800nt	2.0	4.0 ∅	3.0 ∅	10 Δ #	1.0 #	275p□	N-DM	Si	150J	Y220b	D	
57	TIP75T	10MΔ	340nt	20nt	1.4ut	800nt	5.5	4.0 ∅	3.0 ∅	10 Δ #	1.0 #	275p□	N-DM	Si	200J	T03	C∅	
58	TIP575A	10MΔ	340nt	20nt	1.4ut	800nt	5.5	4.0 ∅	3.0 ∅	10 Δ #	1.0 #	275p□	N-DM	Si	200J	T03	C∅	
59	TIP575B	10MΔ	340nt	20nt	1.4ut	800nt	5.5	4.0 ∅	3.0 ∅	10 Δ #	1.0 #	275p□	N-DM	Si	200J	T03	C∅	
60	TIP575C	10MΔ	340nt	20nt	1.4ut	800nt	5.5	4.0 ∅	3.0 ∅	10 Δ #	1.0 #	275p□	N-DM	Si	200J	T03	C∅	
61	2N1386	350n∅			200n	200n	300m	1.0	10m ∅	90	120m	8.0p□	N	Si	175S	T05	A	
62	2N1387	350n∅			350n	350n	300m	1.0	10m ∅	40	100m	8.0p□	N	Si	175S	T05	A	
63 #	BD743	350nt	20nt		500nt	400nt	2.0	4.0 ∅	5.0 ∅	20 # Δ			N-DE	Si	150J	Y220a	D	
64 #	BD743A	350nt	20nt		500nt	400nt	2.0	4.0 ∅	5.0 ∅	20 # Δ			N-DE	Si	150J	Y220a	D	
65 #	BD743B	350nt	20nt		500nt	400nt	2.0	4.0 ∅	5.0 ∅	20 # Δ			N-DE	Si	150J	Y220a	D	
66 #	BD743C	350nt	20nt		500nt	400nt	2.0	4.0 ∅	5.0 ∅	20 # Δ			N-DE	Si	150J	Y220a	D	
67 #	BD743D	350nt	20nt		500nt	400nt	2.0	4.0 ∅	5.0 ∅	20 # Δ			N-DE	Si	150J	Y220a	D	
68 #	BD745	350nt	20nt		500nt	400nt	3.5	4.0 ∅	5.0 ∅	20 # Δ			NDE1	Si	150J	T03	D	
69 #	BD745A	350nt	20nt		500nt	400nt	3.5	4.0 ∅	5.0 ∅	20 # Δ			NDE1	Si	150J	T03	D	
70 #	BD745B	350nt	20nt		500nt	400nt	3.5	4.0 ∅	5.0 ∅	20 # Δ			NDE1	Si	150J	T03	D	
71 #	BD745C	350nt	20nt		500nt	400nt	3.5	4.0 ∅	5.0 ∅	20 # Δ			NDE1	Si	150J	T03	D	
72 #	BD745D	350nt	20nt		500nt	400nt	3.5	4.0 ∅	5.0 ∅	20 # Δ			NDE1	Si	150J	T03	D	
73 #	BUW64A	350n∅			1.0u	500n	50 ∅	2.0	200m ∅	30 Δ			N	Si	150J	Y220a	D∅	
74 #	BUW64B	350n∅			1.0u	500n	50 ∅	2.0	200m ∅	30 Δ			N	Si	150J	Y220a	D∅	
75 #	BUW64C	350n∅			1.0u	500n	50 ∅	2.0	200m ∅	30 Δ			N	Si	150J	Y220a	D∅	
76	GSDU15018	35u			1.5u	40u	80	5.0 ∅	15 ∅	10 Δ #	200p		N	Si	200J	T03	C	
77	GSDU15020	35u			1.5u	40u	80	5.0 ∅	15 ∅	10 Δ #	200p		N	Si	200J	T03	C	
78	GSDU30018	35u∅			1.5u	40u	100	5.0 ∅	30 ∅	10 Δ #	350p		N	Si	200J	T03	C	
79	GSDU30020	35u∅			1.5u	40u	100	5.0 ∅	30 ∅	10 Δ #	350p							