

NPN Transistors



SATURATED SWITCHES (Continued)

Type No.	Case Style	V _{CES} * V _{CB0} (V) Min	V _{CEO} (V) Min	V _{EB0} (V) Min	I _{CES} * I _{CB0} (nA) Max	V _{CB} (V)	h _{FE} Min	Max	I _C (mA) @	V _{CE} (V)	V _{CE(SAT)} (V) Max	V _{BE(SAT)} (V) Min	Max	I _C (mA) @ (I _B = $\frac{I_C}{10}$)	C _{ob} (pF) Max	f _T (MHz) Min	Max	I _C (mA) @	t _(off) (ns) Max	Test Conditions	Process No.
2N3009	TO-52	40	15	4	500*	20	15		300	1	0.18	0.75	0.95	30	5	350		30	25	3	22
							25		100	0.5	0.28		1.2	100							
							30	120	30	0.4	0.5		1.7	300							
2N3013	TO-52	40	15	5	300*	20	15		300	1	0.18	0.75	0.95	30	5	350		30	25	3	22
							25		100	0.5	0.28		1.2	100							
							30	120	30	0.4	0.5		1.7	300							
2N3646	Same as PN3646, see below for explanation																				22
PN3646	TO-92 (92)	40*	15	5	500*	20	15		300	1	0.2	0.75	0.95	30	5	350		30	28	3	22
							20		100	0.5	0.28		1.2	100							
							30	120	30	0.4	0.5		1.7	300							
2N3015	TO-39	60	30	5	200	30	10		300	0.7	0.4		1.2	150	8	250		50	60	5 & 6	25
							30	120	150	10	1.0		1.6	500							
2N3252	TO-39	60	30	5	500	40	25		1A	5	0.3		1.0	150	12	200		50	70	7	25
							30	90	500	1	0.5	0.7	1.3	500							
							30		150	1	1.0		1.8	1A							
2N3253	TO-39	75	40	5	500	60	20		750	5	0.35		1.0	150	12	175		50	70	7	25
							25	75	375	1	0.6	0.7	1.3	500							
							25		150	1	1.2		1.8	1A							
2N3444	TO-39	80	50	5	500	60	15		1A	5	0.35		1.0	150	12	150		50	70	7	25
							20	60	500	1	0.6		1.3	500							
							20		150	1	1.2		1.8	1A							
2N3724	TO-39	50	30	6	1.7 μA	40	30		1A	5	0.32		1.1	300	12	300		50	60	7	25
							25		800	2				500							
							35		500	1	0.42	0.9	1.2								
							40		300	1	0.65		1.5	800							
							60	150	100	1											
							30		10	1	0.75		1.7	1A							
2N3724A	TO-39	50	30	6	500	40	25		1.5A	5	0.32		1.1	300	12	300		50	50	8	25
							30		1A	5				500							
							30		800	2	0.42		1.2								
							35		500	1											
							40		300	1	0.65		1.3	800					60	7	
							60	150	100	1											
							30		10	1	0.75		1.4	1A							
2N3725	TO-39	80	50	6	1.7 μA	60	25		1A	5	0.4		1.1	300	10	300		50	60	7	25
							20		800	2	0.52	0.9	1.2	500							
							35		500	1											
							40		300	1	0.8		1.5	800							
							60	150	100	1				1A							
							30		10	1	0.95		1.7								