



**NPN Medium Power**

Device No.	Case Style	V <sub>CB0</sub> (V) Min	V <sub>CEO</sub> (V) Min	V <sub>EB0</sub> (V) Min	I <sub>CB0</sub> (nA) @ V <sub>CB</sub> (V) Max	h <sub>FE</sub> @ I <sub>C</sub> & V <sub>CE</sub> (V) Min Max	V <sub>CE(SAT)</sub> (V) Max & V <sub>BE(SAT)</sub> (V) Min	I <sub>C</sub> (mA) @ V <sub>BE(SAT)</sub> (V) Max	C <sub>ob</sub> (pF) Max	f <sub>T</sub> (MHz) Min Max	I <sub>C</sub> (mA) Max	t <sub>(em)</sub> (μs) Max	Test Conditions	Process No.
PN3568	TO-92 (92)	80	60	5	50 40	40 30 1 40 120 150 1	0.25	150	20	60 600	50			12
TN3019A	TO-226 (99)	140	80	7	10 90	50 1 10 90 10 10 100 300 150 10 50 500 10 15 1A 10	0.2 0.5	150 1.0 500 1.1	12	100	50			12 (5-39)
MPS805	TO-92 (92)	40	25	6	100 35	45 5 1 80 300 100 1 40 800 1	0.5	800 1.2	9	100	50			30 (5-154)
MPSA05	TO-92 (92)	60	60	4	100 60	100 10 1 100 100 1	0.25	100		100	10			33
MPSA06	TO-92 (92)	80	80	4	100 80	100 10 1 100 100 1	0.25	100		100	10			33 (5-160)
TN5320A	TO-226 (99)	100	80			30 130 500 4 10 1A 2	0.5	500				1.8	(Note 1)	34
TN3440A	TO-226 (99)	300	250	7	200 250	30 2 10 40 160 20 10	0.5	50 1.3	10	15	10			36 (5-45)
TN6714A	TO-226 (99)	40	30	5	100 40	55 10 1 60 100 1 50 250 1A 1	0.5	1A	30					37 (5-126)
TN6705A	TO-226 (99)	60	45	5	100 100	40 50 2 40 250 250 2 25 500 2	0.5 1	500 1A	30					38
TN6715A	TO-226 (99)	40	50	5	100 50	60 10 1 50 250 100 1	0.5	1A	30					38 (5-130)

NOTE: National preferred device for each process in **bold**. Number shown in parentheses indicates location (section-page) of device datasheet.

## NPN Medium Power (continued)

Device No.	Case Style	V <sub>CEO</sub> (V) Min	V <sub>CE0</sub> (V) Min	V <sub>EB0</sub> (V) Min	I <sub>CBO</sub> (mA) @ Max	V <sub>CB</sub> (V)	h <sub>FE</sub> @		I <sub>C</sub> & V <sub>CE</sub> (V)	V <sub>CE(SAT)</sub> (V) & V <sub>BE(SAT)</sub> (V) @	I <sub>C</sub> (mA)	C <sub>ob</sub> (pF) Max	f <sub>T</sub> (MHz) @		I <sub>C</sub> (mA)	t <sub>(om)</sub> (ns) Max	Test Conditions	Process No.
							Min	Max					Min	Max				
TN6717A	TO-226 (99)	80	80	5	100	60	50	250	1	0.5	250	30						39 (5-134)
MPSA42	TO-92 (92)	300	300	6	100	200	25	40	10	0.5	20	3	50	10				48 (5-172)
MPSA43	TO-92 (92)	200	200	6	100	160	25	40	10	0.4	20	4	50	10				48
TN6719A	TO-226 (99)	300	300	7	100	200	25	40	10				30	300	15			48

### TEST CONDITIONS

Note 1: I<sub>C</sub> = 500 mA, V<sub>CC</sub> = 30V, I<sub>B</sub><sup>1</sup> = I<sub>B</sub><sup>2</sup> = 50 mA.

NOTE: National preferred device for each process in bold. Number shown in parentheses indicates location (section-page) of device datasheet.