

T-27-90

PLASTIC-CASE BIPOLAR TRANSISTORS

PNP Transistors

'2N' and 'TP' Device Types

ELECTRICAL CHARACTERISTICS at T_A = 25°C

Device Type	I _C Max. (mA)	V _{(BR)CBO} (V)	V _{(BR)CEO} (V)	V _{(BR)EBO} (V)	I _{CBO}		DC Current Gain				V _{CE(sat)}		f _T		C _{ob} ¹ (pF)	t _s ¹ (ns)	NF ¹ (dB)	Process
					Max. (nA)	@V _{CB} (V)	h _{FE} Min.	h _{FE} Max.	@I _C (mA)	@V _{CE} (V)	Max. (V)	@I _C (mA)	Min. (MHz)	@I _C (mA)				
TP3644	500	45	45	5.0	35 ³	30	100	300	50	10	0.25	50	200	20	8.0	100	—	JFA
2N3702	500	40	25	5.0	100	20	60	300	50	5.0	0.25	50	100	50	12	—	—	JFA
2N3703	500	50	30	5.0	100	20	30	150	50	5.0	0.25	50	100	50	12	—	—	JFA
TP3798	50	60	60	5.0	10	50	150	450	0.5	5.0	0.2	0.1	100	1.0	4.0	—	3.5	BXE
TP3798A	50	90	90	5.0	10	50	150	450	0.5	5.0	0.2	0.1	100	1.0	4.0	—	3.5	BXE
TP3799	50	60	60	5.0	10	50	300	900	0.5	5.0	0.2	0.1	100	1.0	4.0	—	2.5	BXE
TP3799A	50	90	90	5.0	10	50	300	900	0.5	5.0	0.2	0.1	100	1.0	4.0	—	2.5	BXE
2N3905	200	40	40	5.0	—	—	50	150	10	1.0	0.25	10	200	10	4.5	260	5.0	BTB
2N3906	200	40	40	5.0	—	—	100	300	10	1.0	0.25	10	250	10	4.5	300	4.0	BTB
2N4058	100	30	30	6.0	100	20	100	400	0.1	5.0	0.7	10	—	—	—	—	5.0	BXE
2N4059	100	30	30	6.0	100	20	45	660	1.0	5.0	0.7	10	—	—	—	—	—	BXE
2N4060	500	30	30	6.0	100	20	45	165	1.0	5.0	0.7	10	—	—	—	—	—	JFA
2N4061	100	30	30	6.0	100	20	90	330	1.0	5.0	0.7	10	—	—	—	—	—	BXE
2N4062	100	30	30	6.0	100	20	180	660	1.0	5.0	0.7	10	—	—	—	—	—	BXE
2N4121	200	40	40	5.0	25 ³	30	70	200	10	1.0	0.14	10	400	10	4.5	150	4.0	BTB
2N4122	200	40	40	5.0	25 ³	30	150	300	10	1.0	0.14	10	450	10	4.5	150	4.0	BTB
2N4125	100	30	30	4.0	50	20	50	150	2.0	1.0	0.4	50	200	10	4.5	—	5.0	BXE
2N4126	100	25	25	4.0	50	20	120	360	2.0	1.0	0.4	50	250	10	4.5	—	4.0	BXE
2N4142	200	60	40	5.0	—	—	40	120	150	10	0.4	150	200	50	8.0	100	—	BTB
2N4143	200	60	40	5.0	—	—	100	300	150	10	0.4	150	200	50	8.0	100	—	BTB
2N4249	100	60	60	5.0	10	40	100	300	0.1	5.0	0.25	10	—	—	6.0	—	3.0	BXE
2N4250	100	40	40	5.0	10	40	250	700	0.1	5.0	0.25	10	—	—	6.0	—	2.0	BXE
2N4250A	100	60	60	5.0	10	50	250	700	0.1	5.0	0.25	10	—	—	6.0	—	2.0	BXE
2N4288	100	30	25	6.0	50	25	150	600	1.0	5.0	0.35	1.0	40	1.0	8.0	—	—	BXE
2N4289	100	60	45	7.0	10	45	150	600	1.0	5.0	0.35	1.0	40	1.0	8.0	—	4.0	BXE
2N4290	500	30	20	5.0	500	20	50	300	100	10	0.4	100	100	10	10	—	—	JFA
2N4291	500	40	30	6.0	200	30	100	300	100	10	0.4	100	100	10	10	—	—	JFA
TP4314	1000	90	65	—	250	60	50	250	150	10	1.4	150	60	50	30	—	—	DJC
TP4354	1000	60	60	5.0	50	50	50	500	10	10	0.15	150	100	50	30	400	3.0	DJC
TP4355	1000	60	60	5.0	50	50	100	400	10	10	0.15	150	100	50	30	400	3.0	DJC
TP4356	1000	80	80	5.0	50	50	50	250	10	10	0.15	150	100	50	30	400	3.0	DJC
2N4402	500	40	40	5.0	—	—	50	150	150	2.0	0.4	150	150	20	10	225	—	DDA
2N4403	500	40	40	5.0	—	—	100	300	150	2.0	0.4	150	200	20	10	225	—	DDA
TP4413	500	40	30	5.0	10	30	120	—	1.0	5.0	0.2	1.0	20	—	8.0	—	—	JFA
TP4415	500	40	20	5.0	10	30	100	—	1.0	5.0	0.2	1.0	20	—	8.0	—	—	JFA
2N4916	200	30	30	5.0	25 ³	15	70	200	10	1.0	0.14	10	400	10	4.5	150	4.0	BTB
2N4917	200	30	30	5.0	25 ³	15	150	300	10	1.0	0.14	10	450	10	4.5	150	4.0	BTB
2N4964	100	—	40	4.0	100	30	40	400	5.0	10	0.25	10	125	5.0	4.0	—	—	BXE
2N4965	100	50	50	—	50	35	150	300	0.1	5.0	0.3	10	40	0.5	4.0	—	3.0	BXE
2N4971	500	60	40	5.0	20	50	40	120	150	10	0.4	150	200	50	8.0	100	—	JFA
2N4972	500	60	40	5.0	20	50	100	300	150	10	0.4	150	200	50	8.0	100	—	JFA
2N5086	100	50	50	—	50	35	150	500	0.1	5.0	0.3	10	40	0.5	4.0	—	3.0	BXE

NOTES:

- 1) Maximum at typical JEDEC conditions.
- 2) μ A.

3) V_{(BR)CES}/I_{CES}, as applicable.

4) mA.

5) V_{(BR)CER} at R = 10 Ω .