

8514019 SPRAGUE. SEMICONDS/ICS

93D 03586 D T-27-90

PLASTIC-CASE BIPOLAR TRANSISTORS

NPN 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)	α V _{CB} (V)	h _{FE} Min.	h _{FE} Max.	α I _C (mA)	α V _{CE} (V)	Max. (V)	α I _C (mA)	Min. (MHz)	α I _C (mA)				
2N3416	500	50	50	5.0	100	50	75	225	2.0	4.5	0.3	50	—	—	—	—	—	JGA
2N3417	500	50	50	5.0	100	50	180	540	2.0	4.5	0.3	50	—	—	—	—	—	JGA
TP3444	800	80	50	5.0	500	60	20	60	500	1.0	0.6	500	150	50	12	70	—	BHB
TP3564	50	30	15	4.0	50	15	20	500	15	10	0.3	20	400	15	3.5	—	—	DMA
TP3565	100	30	25	6.0	50	25	150	600	1.0	10	0.35	1.0	40	1.0	4.0	—	—	FEE
TP3566	500	40	30	5.0	50	20	150	600	10	10	1.0	100	—	—	25	—	—	JGA
TP3567	800	80	40	5.0	50	40	40	120	150	1.0	0.25	150	60	50	20	—	—	JLA
TP3568	800	80	60	5.0	50	40	40	120	150	1.0	0.25	150	60	50	20	—	—	JLA
TP3569	800	80	40	5.0	50	40	100	300	150	1.0	0.25	150	60	50	20	—	—	JLA
TP3641	500	60 ³	30	5.0	50 ³	50	40	120	150	10	0.22	150	250	50	8	—	—	JGA
TP3642	500	60	45	5.0	50 ³	50	40	120	150	10	0.22	150	250	50	8	—	—	JGA
TP3643	500	60	30	5.0	50 ³	50	100	300	150	10	0.22	150	250	50	8	—	—	JGA
TP3691	100	35	20	4.0	50	15	40	160	10	1.0	0.7	10	200	10	3.5	—	—	FEE
TP3692	100	35	20	4.0	50	15	100	400	10	1.0	0.7	10	200	10	3.5	—	—	FEE
TP3693	100	45	45	4.0	50	35	40	160	10	10	—	—	200	10	3.5	—	4.0	FFB
TP3694	100	45	45	4.0	50	30	100	400	10	1.0	—	—	200	10	6.0	—	—	FFB
TP3700	800	140	80	7.0	10	90	100	300	150	10	0.2	150	100	50	12	—	4.0	JLA
TP3701	800	140	80	7.0	10	90	40	120	150	10	0.2	150	80	50	12	—	—	DID
2N3704	500	50	30	5.0	100	20	100	300	50	2.0	0.6	100	100	50	12	—	—	JGA
2N3705	500	50	30	5.0	100	20	50	150	50	2.0	0.8	100	100	50	12	—	—	JGA
2N3706	500	40	20	5.0	100	20	30	600	50	2.0	1.0	100	100	50	12	—	—	JGA
2N3707	100	30	30	6.0	100	20	100	400	0.1	5.0	1.0	10	—	—	—	—	5.0	FEE
2N3708	100	30	30	6.0	100	20	45	660	1.0	5.0	1.0	10	—	—	—	—	—	FEE
2N3709	100	30	30	6.0	100	20	45	165	1.0	5.0	1.0	10	—	—	—	—	—	FEE
2N3710	100	30	30	6.0	100	20	90	330	1.0	5.0	1.0	10	—	—	—	—	—	FEE
2N3711	100	30	30	6.0	100	20	180	660	1.0	5.0	1.0	10	—	—	—	—	—	FEE
2N3721	500	18	18	5.0	500	18	60	660	2.0	10	—	—	—	—	12	—	—	JGA
TP3724	800	50	30	6.0	1700	40	60	150	100	1.0	0.32	300	300	50	12	60	—	BHB
TP3724A	800	50	30	6.0	500	40	60	150	100	1.0	0.32	300	300	50	12	50	—	BHB
2N3825	50	30	15	4.0	100	15	20	—	2.0	10	0.25	2.0	200	2.0	3.5	—	5.5	DMA
2N3827	100	60	45	4.0	100	30	100	400	10	10	—	—	200	10	3.5	—	—	FEE
2N3858	100	30	30	4.0	500	18	60	120	2.0	4.5	—	—	90	2.0	4.0	—	—	FEE
2N3858A	100	60	60	6.0	500	18	60	120	10	1.0	—	—	90	2.0	4.0	—	—	FEE
2N3859	100	30	30	4.0	500	18	100	200	2.0	4.5	—	—	90	2.0	4.0	—	—	FEE
2N3859A	100	60	60	6.0	500	18	100	200	10	1.0	—	—	90	2.0	4.0	—	—	FEE
2N3860	100	30	30	4.0	500	18	150	300	2.0	4.5	—	—	90	2.0	4.0	—	—	FEE
2N3877	100	70	70	4.0	500	70	20	250	2.0	4.5	—	—	—	—	—	—	—	FEE
2N3877A	100	85	85	4.0	500	70	20	250	2.0	4.5	—	—	—	—	—	—	—	FEE
2N3900	100	18	18	5.0	100	18	250	500	2.0	4.5	—	—	—	—	12	—	—	FEE
2N3901	100	18	18	5.0	100	15	350	700	2.0	4.5	—	—	—	—	—	—	5.0	FEE
2N3903	100	60	40	6.0	50	30	50	150	10	1.0	0.2	10	250	10	4.0	—	6.0	FFB

NOTES:
 1) Maximum at typical JEDEC conditions.
 2) μA.
 3) V_{(BR)CES}/I_{CES}, as applicable.
 4) mA.
 5) V_{(BR)CER} at R = 10Ω.