NPN Transistors

'TH' 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} Max. (nA)	@ V_{CB} (V)	DC Current Gain h_{FE} Min.	h_{FE} Max.	@ I_C (mA)	@ V_{CE} (V)	$V_{CE(sat)}$ Max. (V)	@ I_C (mA)	f_T Min. (MHz)	@ I_C (mA)	C_{ob}[1] (pF)	t_s[1] (ns)	NF[1] (dB)	Process
THC697	500	60	45	5.0	1.0[2]	30	40	120	150	10	1.5	150	50	50	35	—	—	BBC
THC699	800	120	80	5.0	2.0[2]	60	40	120	150	10	5.0	150	50	50	20	—	—	DAC
THC718	500	60	40	5.0	1.0[2]	30	40	120	150	10	1.5	150	50	50	35	—	—	BBC
THC760	100	45	45	8.0	200	30	76	300	1.0	5.0	1.0	10	50	1.0	8.0	—	—	BAA
THC760A	100	60	60	8.0	100	30	76	333	1.0	5.0	1.0	10	50	1.0	8.0	—	—	BAA
THC915	100	70	50	5.0	10	60	50	200	10	5.0	1.0	10	—	—	3.5	—	—	BAA
THC916	100	45	25	5.0	10	30	50	200	10	1.0	0.5	10	—	—	6.0	—	—	BAA
THC917	50	30	15	3.0	1.0	15	20	—	3.0	1.0	0.5	3.0	500	4.0	3.0	—	—	DMA
THC918	50	30	15	3.0	10	15	20	—	3.0	1.0	0.4	10	600	4.0	1.7	—	—	DMA
THC929	100	45	45	5.0	10	45	40	120	0.01	5.0	1.0	10	30	0.5	8.0	—	4.0	BAA
THC929A	100	60	45	6.0	2.0	45	40	120	0.01	5.0	0.5	10	45	0.5	6.0	—	4.0	BAA
THC930	100	45	45	5.0	10	45	100	300	0.01	5.0	1.0	10	30	0.5	8.0	—	3.0	BAA
THC930A	100	60	60	6.0	2.0	45	100	300	0.01	5.0	0.5	10	45	0.5	6.0	—	3.0	BAA
THC956	500	75	35	7.0	10	60	100	300	150	10	1.5	150	70	50	25	—	8.0	BBC
THC981	100	80	80	8.0	1.0	30	36	100	1.0	5.0	3.0	10	50	1.0	5.0	—	—	BAA
THC1420	500	60	30	5.0	1.0[2]	30	100	300	150	10	1.5	150	50	50	35	—	—	BBC
THC1566	100	80	60	5.0	1.0[2]	40	80	200	5.0	5.0	1.0	10	60	5.0	10	—	—	BAA
THC1613	500	75	35	7.0	10	60	40	120	150	10	1.5	150	60	50	25	—	12	BBC
THC1711	500	75	35	7.0	10	60	100	300	150	10	1.5	150	60	50	25	—	8.0	BBC
THC2017	800	60	60	8.0	10[2]	30	50	200	200	10	2.0	200	—	—	—	—	—	DAC
THC2102	800	120	65	7.0	2.0	60	40	120	150	10	0.5	150	60	50	15	—	6.0	DAC
THC2192	800	60	40	5.0	10	30	100	300	150	10	0.35	150	50	50	10	—	—	DAC
THC2192A	800	60	40	5.0	10	30	100	300	150	10	0.25	150	50	50	20	—	—	DAC
THC2195	800	45	25	5.0	100	30	20	—	150	10	0.35	150	50	50	20	—	—	DAC
THC2195A	800	45	25	5.0	100	30	20	—	150	10	0.25	150	50	50	20	—	—	DAC
THC2218	500	60	30	5.0	10	50	40	120	150	10	0.4	150	250	20	8.0	—	—	BBC
THC2218A	500	75	40	6.0	10	60	40	120	150	10	0.3	150	250	20	8.0	225	—	DCA
THC2219	500	60	30	5.0	10	50	100	300	150	10	0.4	150	250	20	8.0	—	—	BBC
THC2219A	500	75	40	6.0	10	60	100	300	150	10	0.3	150	300	20	8.0	225	—	DCA
THC2221	500	60	30	5.0	10	50	40	120	150	10	0.4	150	250	20	8.0	—	—	BBC
THC2221A	500	75	40	6.0	10	60	40	120	150	10	0.3	150	250	20	8.0	225	—	DCA
THC2222	500	60	30	5.0	10	50	100	300	150	10	0.4	150	250	20	8.0	—	—	BBC
THC2222A	500	75	40	6.0	10	60	100	300	150	10	0.3	150	250	20	8.0	225	—	DCA
THC2243	800	120	80	7.0	10	60	40	120	150	10	0.35	150	50	50	15	—	—	DAC
THC2243A	800	120	80	7.0	10	60	40	120	150	10	0.25	150	50	50	15	—	—	DAC
THC2270	800	60	45	7.0	50	60	50	200	150	10	0.9	150	100	50	15	—	6.0	DAC
THC2484	100	60	60	6.0	10	45	100	500	10[2]	5.0	0.35	1.0	15	0.05	6.0	—	3.0	BAA
THC2504	100	60	45	6.0	2.0	45	100	300	10[2]	5.0	0.5	10	45	0.5	7.0	—	3.0	BAA
THC2509	100	125	80	7.0	5.0	100	40	—	10	5.0	1.0	5.0	45	5.0	6.0	—	7.0	BAA

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