

Transistors

Bi-Polar Types (Maximum Ratings at $T_C = 25^\circ\text{C}$ Unless Otherwise Noted)

ECG Type	Description and Application	Collector To Base Volts BV_{CBO}	Collector To Emitter Volts BV_{CEO}	Base to Emitter Volts BV_{EBO}	Max. Collector Current I_C Amps	Max. Device Diss. P_D Watts	Freq. in MHz f_t	Current Gain h_{FE}	Package	
									Case	Fig. No.
ECG10	NPN-Si, Low Noise, UHF/VHF Amp (G_P 10 dB Typ)	25	12	3	70 mA	.600	5 GHz	40 min	TO-92	T16
ECG11	NPN-Si, Hi Gain, Hi Current, Gen Purp (Compl to ECG12)	40	20	7	5	.75	150	200 min	TO-92	T16
ECG12	PNP-Si, Hi Gain, Hi Current, Gen Purp (Compl to ECG11)	27	18	7	5	.75	120	180 min	TO-92	T16
ECG13	NPN-Si, Hi Gain, Gen Purp Amp	25	20	12	.5	.6	200	400 min	M-71	T20-3
ECG14	PNP-Si, Gen Purp, AF Amp, Driver	80	80	5	.7	.75	100	120 min	M-68	T20-2
ECG15	NPN-Si, VHF Amp, Mixer, Osc, UHF Osc	30	18	4	50 mA	.300	600 min	40 min	M-68	T20-2
ECG16	NPN-Si, Gen Purp Small Signal Amp, Low Noise (Compl to ECG17)	50	40	5	.100	.300	180	300	M-71	T20-3
ECG17	PNP-Si, Gen Purp Small Signal Amp, Low Noise (Compl to ECG16)	50	40	5	.100	.300	140	300	M-71	T20-3
ECG18	NPN-Si, AF Driver, Gen Purp Amp (Compl to ECG19)	80	80	5	.700 1 peak	1	120	120 min	M-71	T20-3
ECG19	PNP-Si, AF Driver, Gen Purp Amp (Compl to ECG18)	80	80	5	.700 1 peak	1	100	120 min	M-71	T20-3
ECG20	NPN-Si, AF PO, Dr, Series Pass (Compl to ECG21)	40	32	5	2 2.5 peak	1	100	120 min	M-71	T20-3
ECG21	PNP-Si, AF PO, Dr, Series Pass (Compl to ECG20)	40	32	5	2 3 peak	1	100	120 min	M-71	T20-3
ECG22	NPN-Si, AF PO, Dr, Gen Purp Amp	100	80	5	1 2 peak	1	100	120 min	M-71	T20-3
ECG23	NPN-Si, Low Noise UHF/VHF Amp, Antenna Amp, H.F. IF Amp (G_P 15 dB Typ)	30	14	3	50 mA	.250	2 GHz	80 typ	TO-92	T16
ECG24	NPN-Si, Gen Purp Amp, Sw (Compl to ECG25)	100	80	5	1.25	1	50	80 min	TO-237	T17
ECG25	PNP-Si, Gen Purp Amp, Sw (Compl to ECG24)	100	80	5	1.25	1	50	80 min	TO-237	T17
ECG26	NPN-Si, Audio Amp, Lo Noise	120	120	5	50 mA	.3 ($T_A = 25^\circ\text{C}$)	100	300 min	SP-92	T13-1
ECG27	PNP-Ge, Hi Current Gen Purp Amp	60	45	30	60	170	2 (kHz)	120 typ	TO-3	T28A
ECG28	PNP-Ge, Hi Current Gen Purp Amp	60	45	30	60	170	2 (kHz)	120 typ	TO-68	T29A
ECG29	NPN-Si, Hi Pwr Amp, Sw, $t_f = .3 \mu\text{sec}$ typ (Compl to ECG30)	80	80	5	50	300	2 min	20 min	TO-3	T28A
ECG30	PNP-Si, Hi Pwr Amp, Sw, $t_f = .3 \mu\text{sec}$ typ (Compl to ECG29)	80	80	5	50	300	2 min	20 min	TO-3	T28A
ECG31	NPN-Si, AF Driver Output (Compl to ECG32)	160	160	6	1	.9 ($T_A = 25^\circ\text{C}$)	20 min	100 min	TO-92M	T18
ECG32	PNP-Si, AF Driver Output (Compl to ECG31)	160	160	6	1	.9 ($T_A = 25^\circ\text{C}$)	15 min	100 min	TO-92M	T18
ECG33	NPN-Si, Audio Pwr Amp (Compl to ECG34)	160	160	5	15	150	80	120 min	TB-34	T44
ECG34	PNP-Si, Audio Pwr Amp (Compl to ECG33)	160	160	5	15	150	60	120 min	TB-34	T44

Notes: * MP - Matched pair

Frequency at which common emitter current gain is 70.0% of low frequency gain

• When alternate packages are shown it indicates a change is in progress. Although only one package is available both packages will be shown as long as the obsolete package may be encountered in the field.

Package Outlines - See Page 1-91