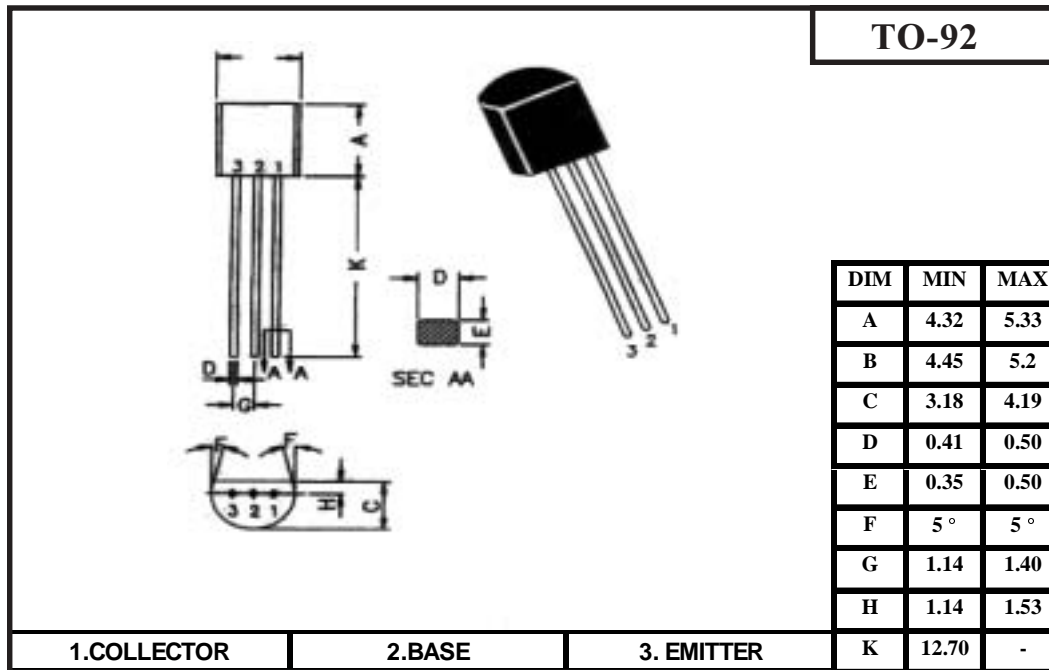


PNP Planar Epitaxial Transistor



Absolute Maximum Ratings (Ta=25°C)

	Symbol	-	Ratings	Unit
Collector-Emmitter Voltage	V_{CEO}	-	65	V
Collector-Emmitter Voltage	V_{CES}	-	80	V
Collector Base Voltage	V_{CBO}	-	80	V
Emitter Base Voltage	V_{EBO}	-	5	V
Collector current Continuous	I_C	-	100	mA
Peak	I_{CM}	-	200	mA
Base Current - Peak	I_{BM}	-	200	mA
Emitter Current - Peak	I_{EM}	-	200	mA
Collector Power Dissipation Ta = 25 °C	P_{TA}	-	500	mW
Operating and Storage Junction	$T_j T_{stg}$	-	(-55 to +150)	°C
THERMAL RESISTANCE				
Junction to ambient	$R_{th(j-a)}$	-	250	°C / W

Characteristics Ratings

(at $T_a = 25^\circ\text{C}$ unless otherwise specified)

	Symbol	Test Conditions	min.	Typ.	max.	Unit
Collector Emitter Voltage	V_{CEO}	$I_C = 2\text{mA}, I_B = 0$	65	-	-	V
Collector Base voltage	V_{CBO}	$I_C = 100\mu\text{A}, I_E = 0$	80	-	-	V
Emitter Base Voltage	V_{EBO}	$I_E = 100\mu\text{A}, I_C = 0$	5	-	-	V
Collector Cut off Current	I_{CBO}	$V_{CB} = 30\text{V}, I_E = 0$ $V_{CB} = 30\text{V}, I_E = 0, T_J = 150^\circ\text{C}$	-	0.2 -	15 4	nA uA
Collector Cut off Current	I_{CES}	$V_{CE} = 80\text{V}$ $V_{CE} = 80\text{V}, T_J = 125^\circ\text{C}$	-	0.2 -	15 4	nA uA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 2\text{mA}$	75		475	
Collector Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = 10\text{mA}, I_B = 0.5\text{mA}$ $I_C = 100\text{mA}, I_B = 5\text{mA}$	-	0.09 0.25	0.3 0.65	V
Base Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C = 10\text{mA}, I_B = 0.5\text{mA}$ $I_C = 100\text{mA}, I_B = 5\text{mA}$	-	0.7 0.9	-	V
Base Emitter on Voltage	$V_{BE(SAT)}$	$I_C = 2\text{mA}, V_{CE} = 5\text{V}$ $I_C = 10\text{mA}, V_{CE} = 5\text{V}$	0.55 -	0.66 -	0.7 0.82	V

Dynamics Characteristics

Transition Frequency	f_T	$I_C = 10\text{mA}, V_{CE} = 5\text{V}$ $f = 100\text{MHz}$	-	150	-	MHz
Collector Output Capacitance	V_{CBO}	$V_{CB} = 10\text{V}, f = 1\text{MHz}$	-	-	6	pF
Nose Figure	NF	$V_{CE} = 5\text{V}, I_C = 0.2\text{mA}$ $R_S = 2\text{k}\Omega, f = 1\text{KHz},$ $B = 200\text{ Hz}$	-	2	10	dB