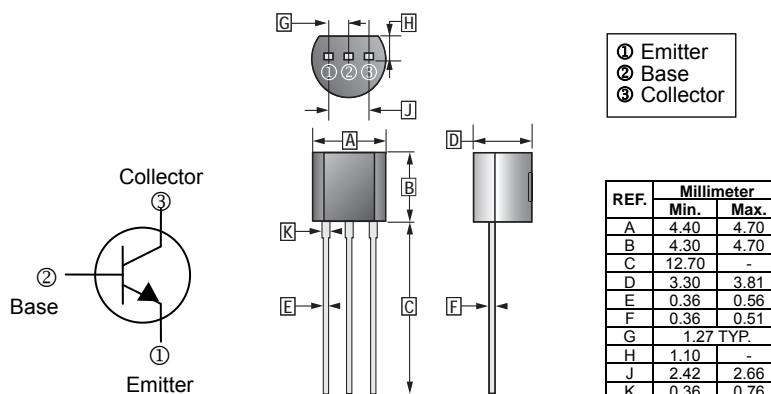


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- General Purpose Amplifier Transistor

TO-92



ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CB0}	40	V
Collector to Emitter Voltage	V_{CEO}	40	V
Emitter to Base Voltage	V_{EBO}	3	V
Collector Current - Continuous	I_C	0.1	A
Collector Power Dissipation	P_C	300	mW
Thermal resistance, junction to ambient	$R_{\theta JA}$	416	$^\circ\text{C} / \text{W}$
Junction, Storage Temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	40	-	-	V	$I_C = 0.01\text{mA}, I_E = 0\text{A}$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	40	-	-	V	$I_C = 1\text{mA}, I_B = 0\text{A}$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	3	-	-	V	$I_E = 0.01\text{mA}, I_C = 0\text{A}$
Collector Cut-Off Current	I_{CBO}	-	-	0.1	μA	$V_{CB} = 60\text{V}, I_E = 0\text{A}$
Collector Cut-Off Current	I_{CEX}	-	-	50	nA	$V_{CE} = 30\text{V}, V_{BE(off)} = 3\text{V}$
Emitter Cut-Off Current	I_{EBO}	-	-	0.1	μA	$V_{EB} = 5\text{V}, I_C = 0\text{mA}$
DC Current Gain	h_{FE}	30	-	200		$V_{CE} = 1\text{V}, I_C = 12\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.3	V	$I_C = 50\text{mA}, I_B = 5\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	0.95	V	$I_C = 50\text{mA}, I_B = 5\text{mA}$
Transition Frequency	f_T	360	-	-	MHz	$V_{CE} = 20\text{V}, I_C = 10\text{mA}, f = 100\text{MHz}$