

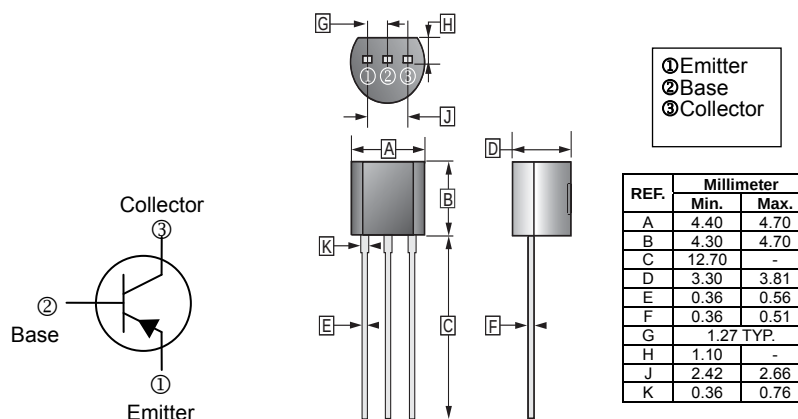
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

FEATURES

- General Purpose Switching Application

TO-92



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	-50	V
Collector to Emitter Voltage	V_{CEO}	-40	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-1.5	A
Collector Power Dissipation	P_C	1	W
Thermal resistance, Junction to ambient	$R_{\theta JA}$	125	$^\circ\text{C} / \text{W}$
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 Conditions
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-50	-	-	V	$I_C = -1\text{mA}, I_E = 0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-40	-	-	V	$I_C = -10\text{mA}, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -1\text{mA}, I_C = 0$
Collector Cut-Off Current	I_{CBO}	-	-	-0.1	μA	$V_{CB} = -50\text{V}, I_E = 0$
Collector Cut-Off Current	I_{CEO}	-	-	-1	μA	$V_{CE} = -40\text{V}, I_E = 0$
Emitter Cut-Off Current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -5\text{V}, I_C = 0$
DC Current Gain	$h_{FE(1)}$	50	-	250		$V_{CE} = -1\text{V}, I_C = -1\text{A}$
	$h_{FE(2)}$	55	-	-		$V_{CE} = -1\text{V}, I_C = -10\text{mA}$
	$h_{FE(3)}$	60	-	-		$V_{CE} = -1\text{V}, I_C = -100\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.5	V	$I_C = -1\text{A}, I_B = -100\text{mA}$
Base to Emitter Voltage	V_{BE}	-	-	-1.2	V	$V_{CE} = -1\text{V}, I_C = -1\text{A}$
Collector Output Capacitance	C_{ob}	-	-	30	pF	$V_{CB} = -10\text{V}, I_E = 0\text{A}, f = 1\text{MHz}$