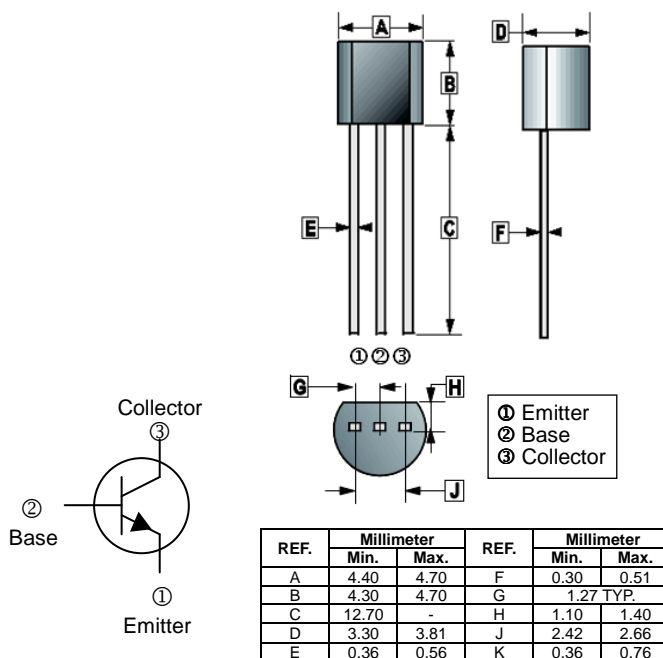


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Power dissipation

TO-92



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

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	40	V
Collector - Emitter Voltage	V_{CEO}	25	V
Emitter - Base Voltage	V_{EBO}	6	V
Collector Current - Continuous	I_C	0.8	A
Collector Power Dissipation	P_C	625	mW
Junction, Storage Temperature	T_J, T_{STG}	125, -55~150	$^\circ\text{C}$

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

Parameter	Test Conditions	Symbol	Min.	Typ.	Max.	Unit
Collector-Base Breakdown Voltage	$I_C = 100\mu\text{A}, I_E = 0$	$V_{(BR)CBO}$	40	-	-	V
Collector-Emitter Breakdown Voltage ¹	$I_C = 1\text{mA}, I_B = 0$	$V_{(BR)CEO}$	25	-	-	V
Emitter-Base Breakdown Voltage	$I_E = 100\mu\text{A}, I_C = 0$	$V_{(BR)EBO}$	6	-	-	V
Collector Cut-Off Current	$V_{CB} = 35\text{V}, I_E = 0$	I_{CBO}	-	-	0.1	μA
Emitter Cut-Off Current	$V_{CE} = 20\text{V}, I_B = 0$	I_{CEO}	-	-	0.1	μA
DC Current Gain	$V_{CE} = 1\text{V}, I_C = 5\text{mA}$	h_{FE1}	45	-	-	
	$V_{CE} = 1\text{V}, I_C = 100\text{mA}$	h_{FE2}	80	-	400	
	$V_{CE} = 1\text{V}, I_C = 800\text{mA}$	h_{FE3}	40	-	-	
Collector-Emitter Saturation Voltage	$I_C = 800\text{mA}, I_B = 80\text{mA}$	$V_{CE(sat)}$	-	-	0.5	V
Base-Emitter Saturation Voltage	$I_C = 800\text{mA}, I_B = 80\text{mA}$	$V_{BE(sat)}$	-	-	1.2	V
Transition frequency	$V_{CE} = 6\text{V}, I_C = 20\text{mA}, f = 30\text{MHz}$	f_T	150	-	-	MHz

Note:

1. Pulse test : pulse width ≤ 300 S, duty cycle $\leq 2\%$.