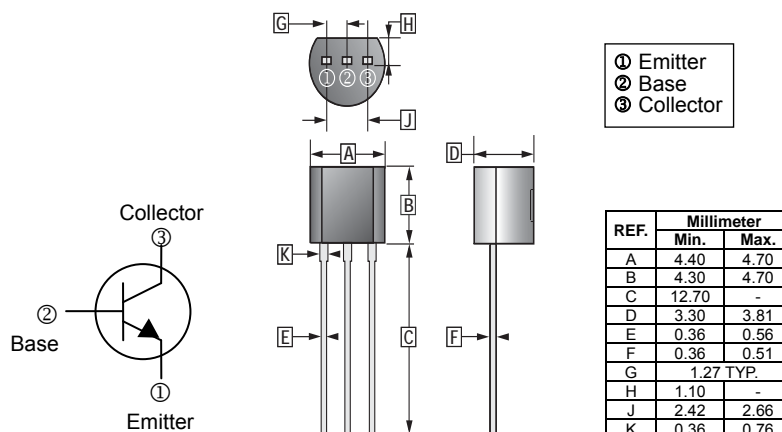


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- High DC Current Gain
- High Transition Frequency

TO-92



## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V <sub>CB0</sub>	30	V
Collector to Emitter Voltage	V <sub>CEO</sub>	25	V
Emitter to Base Voltage	V <sub>EBO</sub>	5	V
Collector Current - Continuous	I <sub>C</sub>	0.2	A
Collector Power Dissipation	P <sub>C</sub>	350	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	357	°C / W
Junction, Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Collector to Base Breakdown Voltage	V <sub>(BR)CBO</sub>	30	-	-	V	I <sub>C</sub> = 0.01mA, I <sub>E</sub> = 0A
Collector to Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	25	-	-	V	I <sub>C</sub> = 1mA, I <sub>B</sub> = 0A
Emitter to Base Breakdown Voltage	V <sub>(BR)EBO</sub>	5	-	-	V	I <sub>E</sub> = 0.01mA, I <sub>C</sub> = 0A
Collector Cut-Off Current	I <sub>CBO</sub>	-	-	50	nA	V <sub>CB</sub> = 20V, I <sub>E</sub> = 0 A
Emitter Cut-Off Current	I <sub>EBO</sub>	-	-	50	nA	V <sub>EB</sub> = 3V, I <sub>C</sub> = 0 mA
DC Current Gain	h <sub>FE</sub> (1)	120	-	360		V <sub>CE</sub> = 1V, I <sub>C</sub> = 2 mA
	h <sub>FE</sub> (2)	60	-	-		V <sub>CE</sub> = 1V, I <sub>C</sub> = 50mA
Collector to Emitter Saturation Voltage	V <sub>CE(sat)</sub>	-	-	0.3	V	I <sub>C</sub> = 50mA, I <sub>B</sub> = 5mA
Base to Emitter Saturation Voltage	V <sub>BE(sat)</sub>	-	-	0.95	V	I <sub>C</sub> = 50mA, I <sub>B</sub> = 5mA
Collector output Capacitance	C <sub>ob</sub>	-	-	4	pF	V <sub>CB</sub> = 5V, I <sub>E</sub> = 0A, f = 1MHz
Transition Frequency	f <sub>T</sub>	300	-	-	MHZ	V <sub>CE</sub> = 20V, I <sub>C</sub> = 10mA, f = 100MHz