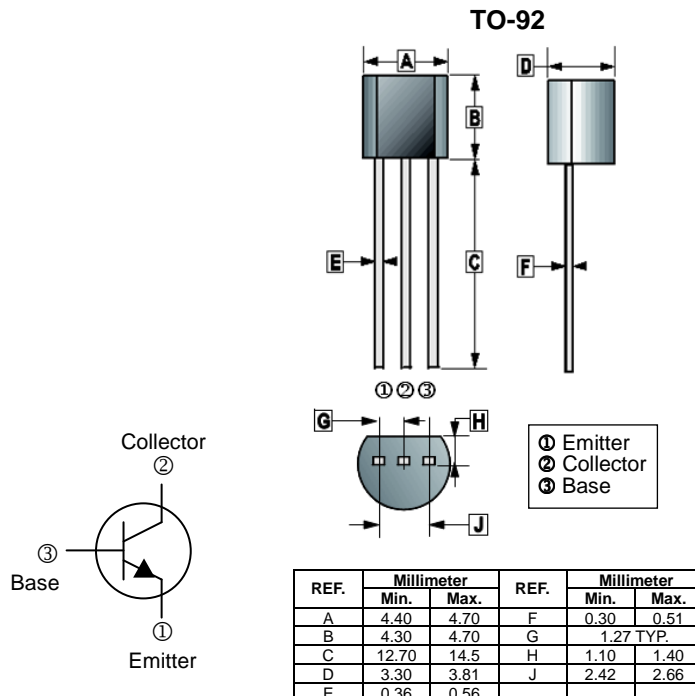


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Low On Resistance
- High Emitter-Base Voltage
- High Reverse  $h_{FE} > 30$  (typ.)  $V_{CE} = -2V$ ,  $I_C = -4mA$ .



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	50	V
Collector to Emitter Voltage	$V_{CEO}$	20	V
Emitter to Base Voltage	$V_{EBO}$	15	V
Continuous Collector Current	$I_C$	300	mA
Collector Power Dissipation	$P_C$	400	mW
Junction and Storage Temperature	$T_J, T_{STG}$	150, -55~150	$^\circ C$

## ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ C$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	50	-	-	V	$I_C = 0.1mA, I_E = 0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	20	-	-	V	$I_C = 1mA, I_B = 0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	15	-	-	V	$I_E = 0.1mA, I_C = 0$
Collector Cut – Off Current	$I_{CBO}$	-	-	0.1	$\mu A$	$V_{CB} = 50V, I_E = 0$
Emitter Cut – Off Current	$I_{EBO}$	-	-	0.1	$\mu A$	$V_{EB} = 15V, I_C = 0$
DC Current Gain	$h_{FE(1)}$	200	-	700		$V_{CE} = 2V, I_C = 4mA$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.3	V	$I_C = 30mA, I_B = 3mA$
Base to Emitter Voltage	$V_{BE}$	-	-	0.71	V	$V_{CE} = 2V, I_C = 4mA$
Collector Output Capacitance	$C_{ob}$	-	7	-	pF	$V_{CB} = 10V, I_E = 0, f = 1MHz$
Transition Frequency	$f_T$	-	30	-	MHz	$V_{CE} = 6V, I_C = 4mA$
Turn-On Time	$t_{on}$	-	160	-	ns	$V_{CC} = 12V, I_C = 12mA, I_B = 1.2mA$
Storage Time	$t_s$	-	500	-	ns	
Fall Time	$t_f$	-	130	-	ns	

**CHARACTERISTIC CURVE**

Static Characteristic

