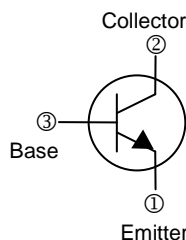
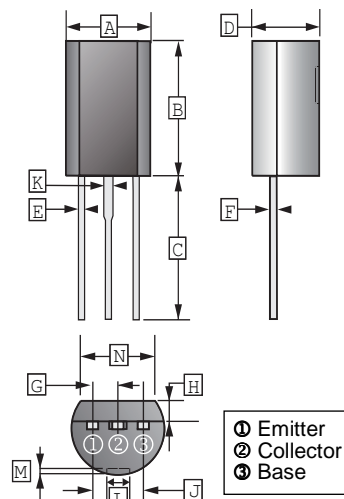


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- High Breakdown Voltage
- High Transition Frequency

## TO-92MOD



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	5.50	6.50	H	1.70	2.05
B	8.00	9.00	J	2.70	3.20
C	12.70	14.50	K	0.85	1.15
D	4.50	5.30	L	1.60 Max	
E	0.35	0.65	M	0.00	0.40
F	0.30	0.51	N	4.00 Min	
G	1.50 TYP.				

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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	$V_{CBO}$	200	V
Collector to Emitter Voltage	$V_{CEO}$	150	V
Emitter to Base Voltage	$V_{EBO}$	5	V
Collector Current - Continuous	$I_C$	50	mA
Collector Power Dissipation	$P_C$	800	mW
Thermal Resistance, Junction To Ambient	$R_{\theta JA}$	156	$^\circ\text{C/W}$
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	$V_{(BR)CBO}$	200	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	150	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	5	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-Off Current	$I_{CBO}$	-	-	0.1	$\mu\text{A}$	$V_{CB}=200\text{V}, I_E=0$
Emitter Cut-Off Current	$I_{EBO}$	-	-	0.1	$\mu\text{A}$	$V_{EB}=5\text{V}, I_C=0$
DC Current Gain	$h_{FE}$	70	-	240		$V_{CE}=5\text{V}, I_C=10\text{mA}$
		50	-	-		$V_{CE}=5\text{V}, I_C=1\text{mA}$
		50	-	-		$V_{CE}=5\text{V}, I_C=50\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	0.5	V	$I_C=10\text{mA}, I_B=1\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE}$	-	-	1	V	$I_C=10\text{mA}, I_B=1\text{mA}$
Transition Frequency	$f_T$	80	-	-	MHz	$V_{CE}=30\text{V}, I_C=10\text{mA}$

**CHARACTERISTIC CURVES**

