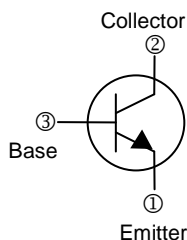
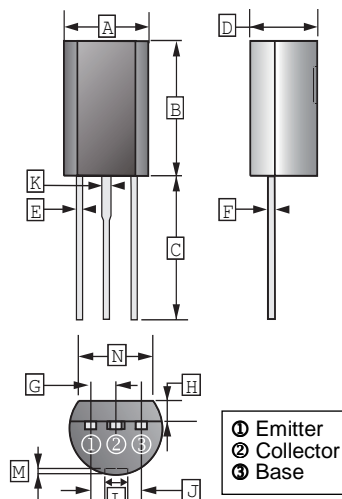


RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## 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<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V <sub>CB0</sub>	200	V
Collector to Emitter Voltage	V <sub>CEO</sub>	150	V
Emitter to Base Voltage	V <sub>EBO</sub>	5	V
Collector Current - Continuous	I <sub>C</sub>	50	mA
Collector Power Dissipation	P <sub>C</sub>	800	mW
Thermal Resistance, Junction To Ambient	R <sub>θJA</sub>	156	°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 Conditions
Collector to Base Breakdown Voltage	V <sub>(BR)CBO</sub>	200	-	-	V	I <sub>C</sub> =100μA, I <sub>E</sub> =0
Collector to Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	150	-	-	V	I <sub>C</sub> =1mA, I <sub>B</sub> =0
Emitter to Base Breakdown Voltage	V <sub>(BR)EBO</sub>	5	-	-	V	I <sub>E</sub> =100μA, I <sub>C</sub> =0
Collector Cut-Off Current	I <sub>CBO</sub>	-	-	0.1	μA	V <sub>CB</sub> =200V, I <sub>E</sub> =0
Emitter Cut-Off Current	I <sub>EBO</sub>	-	-	0.1	μA	V <sub>EB</sub> =5V, I <sub>C</sub> =0
DC Current Gain	h <sub>FE</sub>	70	-	240		V <sub>CE</sub> =5V, I <sub>C</sub> =10mA
		50	-	-		V <sub>CE</sub> =5V, I <sub>C</sub> =1mA
		50	-	-		V <sub>CE</sub> =5V, I <sub>C</sub> =50mA
Collector to Emitter Saturation Voltage	V <sub>CE(sat)</sub>	-	-	0.5	V	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA
Base to Emitter Saturation Voltage	V <sub>BE</sub>	-	-	1	V	I <sub>C</sub> =10mA, I <sub>B</sub> =1mA
Transition Frequency	f <sub>T</sub>	80	-	-	MHz	V <sub>CE</sub> =30V, I <sub>C</sub> =10mA

**CHARACTERISTIC CURVES**

