

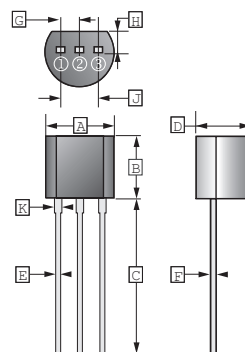
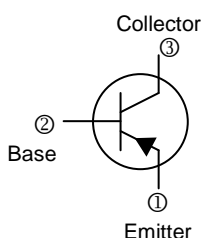
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Switching and amplification in high voltage
- Applications such as telephony
- Low current (max. 600mA)
- High voltage (max. 160V)

## TO-92



REF.	Millimeter	
	Min.	Max.
A	4.40	4.70
B	4.30	4.70
C	12.70	-
D	3.30	3.81
E	0.36	0.56
F	0.36	0.51
G	1.27 TYP.	
H	1.10	-
J	2.42	2.66
K	0.36	0.76

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

PARAMETER	SYMBOL	RATING	UNIT
Collector to Base Voltage	$V_{CBO}$	-160	V
Collector to Emitter Voltage	$V_{CEO}$	-150	V
Emitter to Base Voltage	$V_{EBO}$	-5	V
Collector Current - Continuous	$I_C$	-0.6	A
Collector Power Dissipation	$P_C$	0.625	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 CONDITION
Collector to Base Breakdown Voltage	$V_{(BR)CBO}$	-160	-	-	V	$I_C = -100\mu\text{A}, I_E = 0\text{A}$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-150	-	-	V	$I_C = -1\text{mA}, I_B = 0\text{A}$
Emitter to Base Breakdown Voltage	$V_{(BR)EBO}$	-5	-	-	V	$I_E = -10\mu\text{A}, I_C = 0\text{A}$
Collector Cut-Off Current	$I_{CBO}$	-	-	-50	nA	$V_{CB} = -120\text{V}, I_E = 0\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	-	-	-50	nA	$V_{EB} = -3\text{V}, I_C = 0\text{A}$
DC Current Gain	$h_{FE(1)}$	80	-	-		$V_{CE} = -5\text{V}, I_C = -1\text{mA}$
	$h_{FE(2)}$	60	-	240		$V_{CE} = -5\text{V}, I_C = -10\text{mA}$
	$h_{FE(3)}$	50	-	-		$V_{CE} = -5\text{V}, I_C = -50\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	-	-	-0.5	V	$I_C = -50\text{mA}, I_B = -5\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	-	-	-1	V	$I_C = -50\text{mA}, I_B = -5\text{mA}$
Transition Frequency	$f_T$	100	-	300	MHZ	$V_{CE} = -5\text{V}, I_C = -10\text{mA}, f = 30\text{MHz}$

**CHARACTERISTIC CURVES**

