

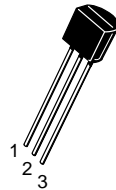
RoHS Compliant Product

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

TO-92

● **FEATURES**

- . Power Dissipation
 P_{CM} : 0.4 W ($T_a = 25\text{ }^\circ\text{C}$)
- . Collector Current
 I_{CM} : 0.15 A
- . Collector-Base Voltage
 $V_{(BR)CBO}$: 60 V



- 1. EMITTER
- 2. COLLECTOR
- 3. BASE

● **ABSOLUTE MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS ($T_a = 25\text{ }^\circ\text{C}$)**

TYPE NUMBER	SYMBOL	TEST CONDITIONS	Min.	Typ.	Max.	UNIT
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	$I_C = 100\text{ }\mu\text{A}$, $I_E = 0\text{ A}$	60	-	-	V
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = 0.1\text{ mA}$, $I_B = 0\text{ A}$	50	-	-	V
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E = 100\text{ }\mu\text{A}$, $I_C = 0\text{ A}$	5	-	-	V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 60\text{ V}$, $I_E = 0\text{ A}$	-	-	0.1	μA
Collector Cut-Off Current	I_{CEO}	$V_{CE} = 50\text{ V}$, $I_B = 0\text{ A}$	-	-	0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 5\text{ V}$, $I_C = 0\text{ A}$	-	-	0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 6\text{ V}$, $I_C = 2\text{ mA}$	70	-	700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100\text{ mA}$, $I_B = 10\text{ mA}$	-	-	0.25	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 100\text{ mA}$, $I_B = 10\text{ mA}$	-	-	1	V
Transition Frequency	f_T	$V_{CE} = 10\text{ V}$, $I_C = 1\text{ mA}$, $f = 30\text{ MHz}$	80	-	-	MHz
Operating and Storage Junction Temperature Range	T_J , T_{STG}	-	- 55 ~ +150			$^\circ\text{C}$

● **h_{FE} VALUES ARE CLASSIFIED AS FOLLOWS:**

Rank	O	Y	GR	BL
h_{FE}	70 ~ 140	120 ~ 240	200 ~ 400	350 ~ 700

Typical Characteristics

