

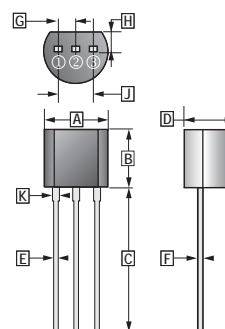
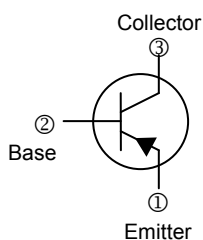
RoHS Compliant Product

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

FEATURES

- High voltage transistors

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}	-350	V
Collector to Emitter Voltage	V_{CEO}	-350	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-0.5	A
Collector Power Dissipation	P_C	0.625	W
Thermal resistance, junction to ambient	$R_{\theta JA}$	200	$^\circ\text{C} / \text{W}$
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	$V_{(BR)CBO}$	-350	-	-	V	$I_C = -100\mu\text{A}, I_E = 0\text{A}$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}^*$	-350	-	-	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	$V_{CB} = -250\text{V}, I_E = 0\text{A}$
Emitter Cut-Off Current	I_{EBO}	-	-	-50	nA	$V_{EB} = -4\text{V}, I_C = 0\text{mA}$
DC Current Gain	h_{FE}^*	20	-	-	V	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$
		30	-	-		$V_{CE} = -10\text{V}, I_C = -10\text{mA}$
		30	-	200		$V_{CE} = -10\text{V}, I_C = -30\text{mA}$
		20	-	200		$V_{CE} = -10\text{V}, I_C = -50\text{mA}$
		15	-	-		$V_{CE} = -10\text{V}, I_C = -100\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}^*$	-	-	-0.3	V	$I_C = -10\text{mA}, I_B = -1\text{mA}$
		-	-	-0.35		$I_C = -20\text{mA}, I_B = -2\text{mA}$
		-	-	-0.5		$I_C = -30\text{mA}, I_B = -3\text{mA}$
		-	-	-1.0		$I_C = -50\text{mA}, I_B = -5\text{mA}$
Base to Emitter Saturation Voltage	$V_{BE(sat)}^*$	-	-	-0.75	V	$I_C = -10\text{mA}, I_B = -1\text{mA}$
		-	-	-0.85		$I_C = -20\text{mA}, I_B = -2\text{mA}$
		-	-	-0.9		$I_C = -30\text{mA}, I_B = -3\text{mA}$
Base to Emitter voltage	$V_{BE(on)}^*$	-	-	-2	V	$V_{CE} = -10\text{V}, I_C = -100\text{mA}$
Collector-Base Capacitance	C_{cb}	-	-	6	pF	$V_{CB} = -20\text{V}, I_E = 0\text{A}, f=1\text{MHz}$
Emitter-Base Capacitance	C_{eb}	-	-	80	pF	$V_{EB} = -0.5\text{V}, I_C = 0\text{A}, f=1\text{MHz}$
Transition Frequency	f_T^*	40	-	200	MHz	$V_{CE} = -20\text{V}, I_C = -10\text{mA}, f=20\text{MHz}$

*Pulse test : Pulse Width $\leq 300 \mu\text{s}$, Duty Cycle $\leq 2.0\%$.

CHARACTERISTIC CURVES

