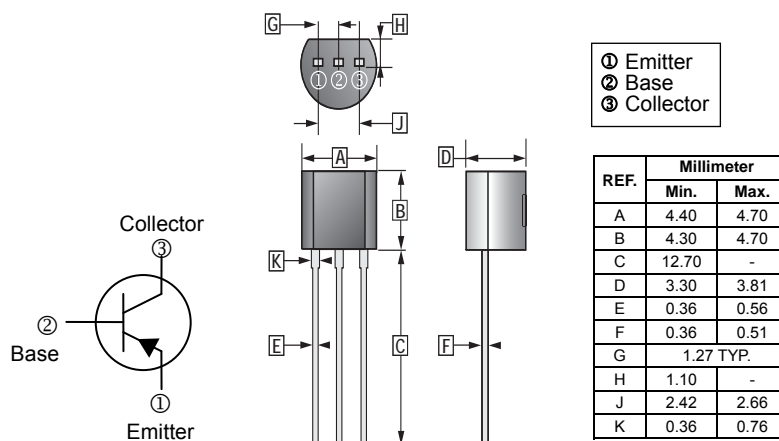


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Switching and amplification in high voltage
- Applications such as telephony
- Low current(max.600mA)
- High voltage(max.130V)

TO-92



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

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CB0}	-130	V
Collector to Emitter Voltage	V_{CEO}	-120	V
Emitter to Base Voltage	V_{EBO}	-5	V
Collector Current - Continuous	I_C	-600	mA
Collector Power Dissipation	P_C	625	mW
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	$V_{(BR)CBO}$	-130	-	-	V	$I_C = -100\mu\text{A}, I_E = 0\text{A}$
Collector to Emitter Breakdown Voltage	$V_{(BR)CEO}$	-120	-	-	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}	-	-	-0.1	μA	$V_{CB} = -100\text{V}, I_E = 0\text{A}$
Emitter Cut-Off Current	I_{EBO}	-	-	-0.1	μA	$V_{EB} = -3\text{V}, I_C = 0\text{mA}$
DC Current Gain	h_{FE1}	30	-	-		$V_{CE} = -5\text{V}, I_C = -1\text{mA}$
	h_{FE2}	40	-	180		$V_{CE} = -5\text{V}, I_C = -10\text{mA}$
	h_{FE3}	40	-	-		$V_{CE} = -5\text{V}, I_C = -50\text{mA}$
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	--	-	-0.2	V	$I_C = -10\text{mA}, I_B = -1\text{mA}$
		--	-	-0.5	V	$I_C = -50\text{mA}, I_B = -5\text{mA}$
Base to Emitter Voltage	$V_{BE(sat)}$	--	-	-1	V	$I_C = -10\text{mA}, I_B = -1\text{mA}$
		--	-	-1	V	$I_C = -50\text{mA}, I_B = -5\text{mA}$
Collector Output Capacitance	C_{ob}	-	-	6	pF	$V_{CB} = -10\text{V}, I_E = 0\text{A}, f = 1\text{MHz}$
Transition Frequency	f_T	100	-	-	MHz	$V_{CE} = -10\text{V}, I_C = -10\text{mA}, f = 30\text{MHz}$

CHARACTERISTIC CURVES

