

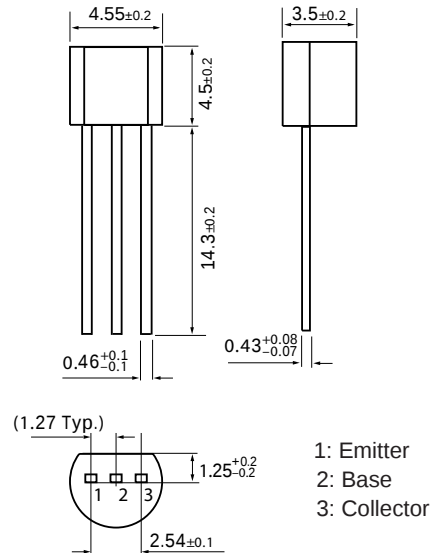
RoHS Compliant Product

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

TO-92

FEATURES

- * Switching and amplification in high voltage
- * Low current(max. 600mA)
- * High voltage(max.180v)



MAXIMUM RATINGS* $T_A=25^\circ\text{C}$ unless otherwise noted

Symbol	Para	meter	Value	Units
V_{CBO}	Collector-Base Voltage		180	V
V_{CEO}	Collector-Emitter Voltage		160	V
V_{EBO}	Emitter-Base Voltage		6	V
I_C	Collector Current -Continuous		0.6	A
P_C	Collector Dissipation		0.625	W
T_J, T_{stg}	Junction and Storage Temperature		-55-150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\ \mu\text{A}, I_E=0$	180			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}^*$	$I_C=1\text{mA}, I_B=0$	160			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\ \mu\text{A}, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=120\text{V}, I_E=0$			50	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			50	nA
DC current gain	$h_{FE(1)}^*$	$V_{CE}=5\text{V}, I_C=1\text{mA}$	80			
	$h_{FE(2)}^*$	$V_{CE}=5\text{V}, I_C=10\text{mA}$	80		250	
	$h_{FE(3)}$	$V_{CE}=5\text{V}, I_C=50\text{mA}$	30			
Collector-emitter saturation voltage	V_{CEsat}^*	$I_C=10\text{mA}, I_B=1\text{mA}$			0.15	V
		$I_C=50\text{mA}, I_B=5\text{mA}$			0.2	
Base-emitter saturation voltage	V_{BEsat}^*	$I_C=10\text{mA}, I_B=1\text{mA}$			1	V
		$I_C=50\text{mA}, I_B=5\text{mA}$			1	
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	100		300	MHz
Collector output capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$			6	pF
Input capacitance	C_{ib}	$V_{BE}=0.5\text{V}, I_C=0, f=1\text{MHz}$			20	pF
Noise figure	NF	$V_{CE}=5\text{V}, I_C=0.25\text{mA}, f=1\text{KHz}, R_g=1\text{k}\Omega$			8	dB

*Pulse test

<http://www.SeCoSGmbH.com/>

Any changing of specification will not be informed individual

ELECTRICAL CHARACTERISTIC CURVES

