

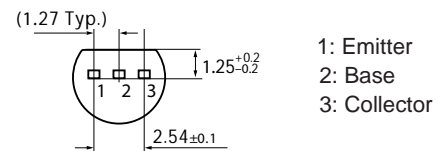
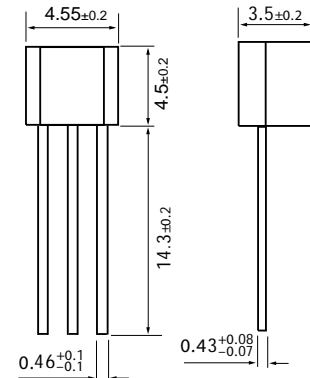
RoHS Compliant Product

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°C unless otherwise noted

Symbol	Para	meter	Value	Units
V _{CB0}	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	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = 100 μ A, I _E =0	180			V
Collector-emitter breakdown voltage	V _{(BR)CEO} *	I _C = 1mA, I _B =0	160			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = 10 μ A, I _C =0	6			V
Collector cut-off current	I _{CBO}	V _{CB} = 120V I _E =0			50	nA
Emitter cut-off current	I _{EBO}	V _{EB} = 4V, I _C =0			50	nA
DC current gain	h _{FE (1)} *	V _{CE} = 5 V, I _C = 1 mA	80			
	h _{FE (2)} *	V _{CE} = 5 V, I _C = 10 mA	80		250	
	h _{FE (3)}	V _{CE} = 5 V, I _C = 50 mA	30			
Collector-emitter saturation voltage	V _{CEsat} *	I _C = 10 mA, I _B = 1 mA			0.15	V
		I _C = 50 mA, I _B = 5 mA			0.2	
Base-emitter saturation voltage	V _{BEsat} *	I _C = 10 mA, I _B = 1 mA			1	V
		I _C = 50 mA, I _B = 5 mA			1	
Transition frequency	f _T	V _{CE} =10V, I _C =10 mA, f=100MHz	100		300	MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz			6	pF
Input capacitance	C _{ib}	V _{BE} =0.5V, I _C =0, f=1MHz			20	pF
Noise figure	NF	V _{CE} =5V, I _C =0.25mA, f=1KHZ, R _g =1kΩ			8	dB

*Pulse test

ELECTRICAL CHARACTERISTIC CURVES

