

DESCRIPTION Suitable for low noise amplifier in the VHF to UHF band.

- FEATURES**
- NF 3.0 dB TYP. @f = 500 MHz
 - G_{pe} 15 dB TYP. @f = 500 MHz
 - f_T 2.0 GHz TYP.

ABSOLUTE MAXIMUM RATINGS

Maximum Temperatures

Storage Temperature -55 to +150 °C

Junction Temperature +150 °C Maximum

Maximum Power Dissipation ($T_a = 25$ °C)

Total Power Dissipation 250 mW

Maximum Voltages and Current ($T_a = 25$ °C)

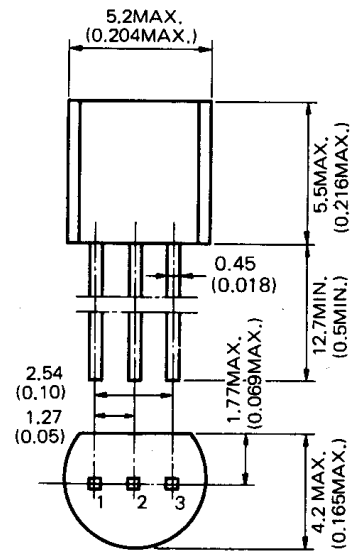
V_{CBO} Collector to Base Voltage 30 V

V_{CEO} Collector to Emitter Voltage 14 V

V_{EBO} Emitter to Base Voltage 3.0 V

I_C Collector Current 50 mA

PACKAGE DIMENSIONS
in millimeters (inches)



1. BASE EIAJ : SC-43A
2. EMITTER JEDEC : TO-92
3. COLLECTOR IEC : PA33

ELECTRICAL CHARACTERISTICS ($T_a = 25$ °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h_{FE}	DC Current Gain	25	80	200		$V_{CE}=10$ V, $I_C=10$ mA
f_T	Gain Bandwidth Product	1.5	2.0		GHz	$V_{CE}=10$ V, $I_E=10$ mA
C_{ob}	Output Capacitance		0.75	1.1	pF	$V_{CB}=10$ V, $I_E=0$, $f=1.0$ MHz*
G_{pe}	Power Gain	13	15		dB	$V_{CE}=10$ V, $I_C=10$ mA, $f=500$ MHz
NF	Noise Figure		3.0	4.0	dB	$V_{CE}=10$ V, $I_C=3.0$ mA, $f=500$ MHz, $R_G=50$ Ω
I_{CBO}	Collector Cutoff Current			0.1	μ A	$V_{CB}=15$ V, $I_E=0$
I_{EBO}	Emitter Cutoff Current			0.1	μ A	$V_{EB}=2.0$ V, $I_C=0$

* The emitter terminal should be connected to the guard terminal of the three-terminal capacitance bridge.