

**DESCRIPTION** 2SC2369 is designed for High frequency Low Noise Amplifier.

**FEATURES**

- NF 1.5 dB TYP. @ f = 1.0 GHz
- MAG 14 dB TYP. @ f = 1.0 GHz

**ABSOLUTE MAXIMUM RATINGS**

Maximum Temperatures

Storage Temperature . . . . . -65 to +150 °C

Junction Temperature . . . . . +150 °C Maximum

Maximum Power Dissipation (Ta=25 °C)

Total Power Dissipation . . . . . 250 mW

Maximum Voltages and Current (Ta=25 °C)

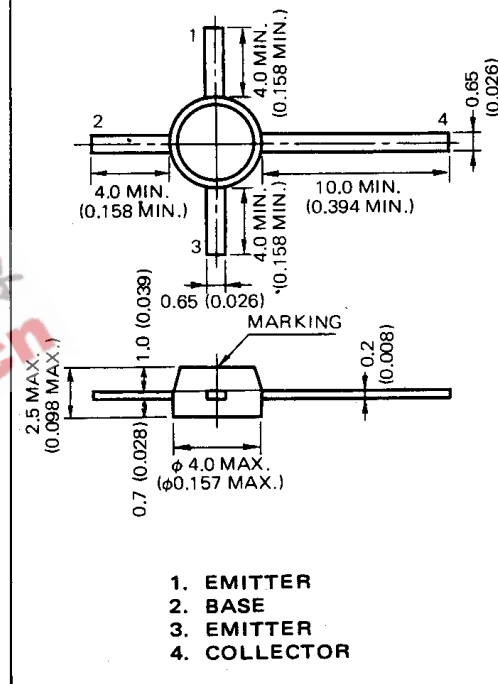
V<sub>CB0</sub> Collector to Base Voltage . . . . . 25 V

V<sub>CEO</sub> Collector to Emitter Voltage . . . . . 12 V

V<sub>EBO</sub> Emitter to Base Voltage . . . . . 3.0 V

I<sub>C</sub> Collector Current . . . . . 70 mA

**PACKAGE DIMENSIONS**  
in millimeters (inches)



**ELECTRICAL CHARACTERISTICS (Ta=25 °C)**

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h <sub>FE</sub>	DC Current Gain	40		200		V <sub>CE</sub> =10 V, I <sub>C</sub> =20 mA
f <sub>T</sub>	Gain Bandwidth Product		4.5		GHz	V <sub>CE</sub> =10 V, I <sub>E</sub> =20 mA
C <sub>ob</sub>	Output Capacitance		0.75	1.0	pF	V <sub>CB</sub> =10 V, I <sub>E</sub> =0, f=1.0 MHz
S <sub>21e</sub>   <sup>2</sup>	Insertion Power Gain	9	11		dB	V <sub>CE</sub> =10 V, I <sub>C</sub> =20 mA, f=1.0 GHz
NF	Noise Figure		1.5	3.0	dB	V <sub>CE</sub> =10 V, I <sub>C</sub> =5 mA, f=1.0 GHz
MAG	Maximum Available Gain		14		dB	V <sub>CE</sub> =10 V, I <sub>C</sub> =20 mA, f=1.0 GHz
I <sub>CBO</sub>	Collector Cutoff Current			0.1	μA	V <sub>CB</sub> =15 V, I <sub>E</sub> =0
I <sub>EBO</sub>	Emitter Cutoff Current			0.1	μA	V <sub>EB</sub> =2.0 V, I <sub>C</sub> =0