

**DESCRIPTION** 2SC2368 is designed for High frequency Low Noise Amplifier.

**FEATURES**

- NF 2.3 dB TYP. @ 500 MHz
- MAG 17 dB TYP. @ 500 MHz

**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

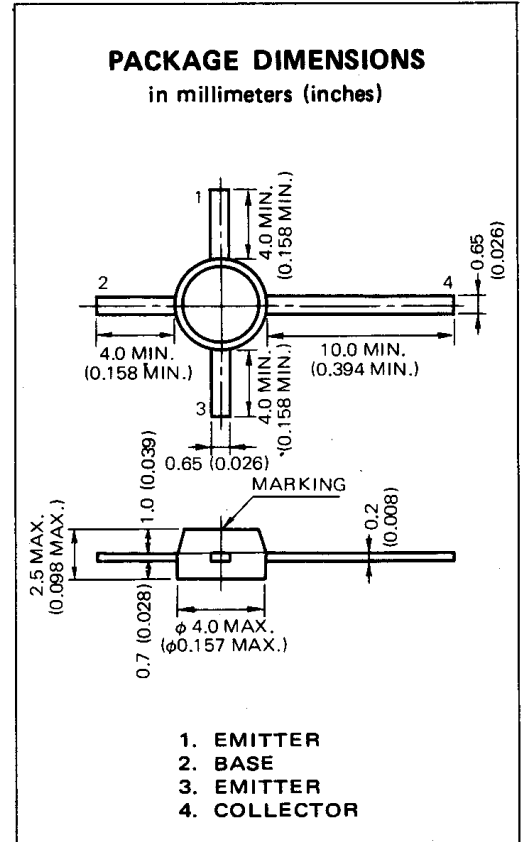
Maximum Voltages and Current (Ta=25 °C)

V<sub>CBO</sub> Collector to Base Voltage . . . . . 30 V

V<sub>CEO</sub> Collector to Emitter Voltage . . . . . 14 V

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

I<sub>C</sub> Collector Current . . . . . 50 mA



**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> =10 mA
f <sub>T</sub>	Gain Bandwidth Product		2.8		GHz	V <sub>CE</sub> =10 V, I <sub>E</sub> =10 mA
C <sub>ob</sub>	Output Capacitance		0.7	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	13	14.5		dB	V <sub>CE</sub> =10 V, I <sub>C</sub> =10 mA, f=500 MHz
NF	Noise Figure		2.3	3.5	dB	V <sub>CE</sub> =10 V, I <sub>C</sub> =3 mA, f=500 MHz
MAG	Maximum Available Gain		17		dB	V <sub>CE</sub> =10 V, I <sub>C</sub> =10 mA, f=500 MHz
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