

NPN SILICON TRANSISTOR

2SC2368

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_{CBO} Collector to Base Voltage 30 V

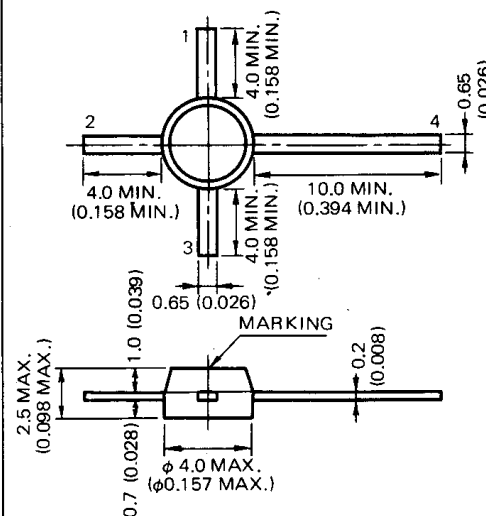
V_{CEO} Collector to Emitter Voltage 14 V

V_{EBO} Emitter to Base Voltage 3.0 V

I_C Collector Current 50 mA

PACKAGE DIMENSIONS

in millimeters (inches)



1. EMITTER
2. BASE
3. EMITTER
4. COLLECTOR

ELECTRICAL CHARACTERISTICS (Ta=25 °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h _{FE}	DC Current Gain	40		200		V _{CE} =10 V, I _C =10 mA
f _T	Gain Bandwidth Product		2.8		GHz	V _{CE} =10 V, I _E =10 mA
C _{ob}	Output Capacitance		0.7	1.0	pF	V _{CB} =10 V, I _E =0, f=1.0 MHz
S _{21e} ²	Insertion Power Gain	13	14.5		dB	V _{CE} =10 V, I _C =10 mA, f=500 MHz
NF	Noise Figure		2.3	3.5	dB	V _{CE} =10 V, I _C =3 mA, f=500 MHz
MAG	Maximum Available Gain		17		dB	V _{CE} =10 V, I _C =10 mA, f=500 MHz
I _{CBO}	Collector Cutoff Current			0.1	μA	V _{CB} =15 V, I _E =0
I _{EBO}	Emitter Cutoff Current			0.1	μA	V _{EB} =2.0 V, I _C =0