NEC
ELECTRON DEVICE

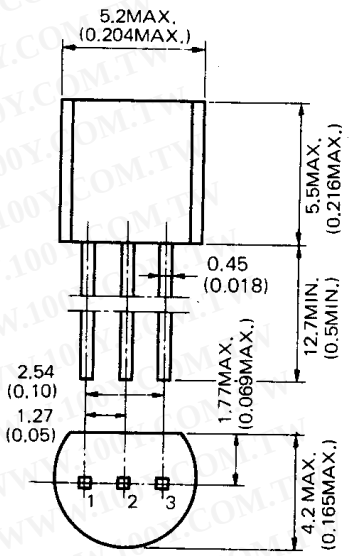
NPN SILICON TRANSISTOR

DESCRIPTION 2SC2408 is designed for High frequency Wide Band Amplifier.

FEATURES

- $|S_{21e}|^2$: 21 dB TYP. @200 MHz
- NF : 2.4 dB TYP. @200 MHz

PACKAGE DIMENSIONS
in millimeters (inches)



1. BASE
2. EMITTER
3. COLLECTOR

EIAJ : SC-43A
JEDEC : TO-92
IEC : PA33

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 . . . . . .600 mW

Maximum Voltages and Current (Ta=25 °C)

V_{CBO} Collector to Base Voltage . . . . . 35 V

V_{CEO} Collector to Emitter Voltage . . . . . 18 V

V_{EBO} Emitter to Base Voltage . . . . . 3.0 V

I_C Collector Current . . . . . .150 mA

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

SYMBOL	CHARACTERISTIC	MIN.	TYP.	MAX.	UNIT	TEST CONDITIONS
h_{FE}	DC Current Gain	30	100	200		V_{CE}=10 V, I_C=50 mA
f_T	Gain Bandwidth Product		3.5		GHz	V_{CE}=10 V, I_E=50 mA
C_{ob}	Output Capacitance		1.25	2.0	pF	V_{CB}=10 V, I_E=0, f=200 MHz
$\|S_{21e}\|^2$	Insertion Power Gain	18	21		dB	V_{CE}=10 V, I_C=50 mA, f=200 MHz, R_G=50 Ω
NF	Noise Figure		2.4	4.0	dB	V_{CE}=10 V, I_C=30 mA, f=200 MHz, R_G=50 Ω
I_{CBO}	Collector Cutoff Current			0.5	μA	V_{CB}=20 V, I_E=0
I_{EBO}	Emitter Cutoff Current			0.5	μA	V_{EB}=2.0 V, I_C=0