

isc Silicon NPN RF Transistor

2SC2408

DESCRIPTION

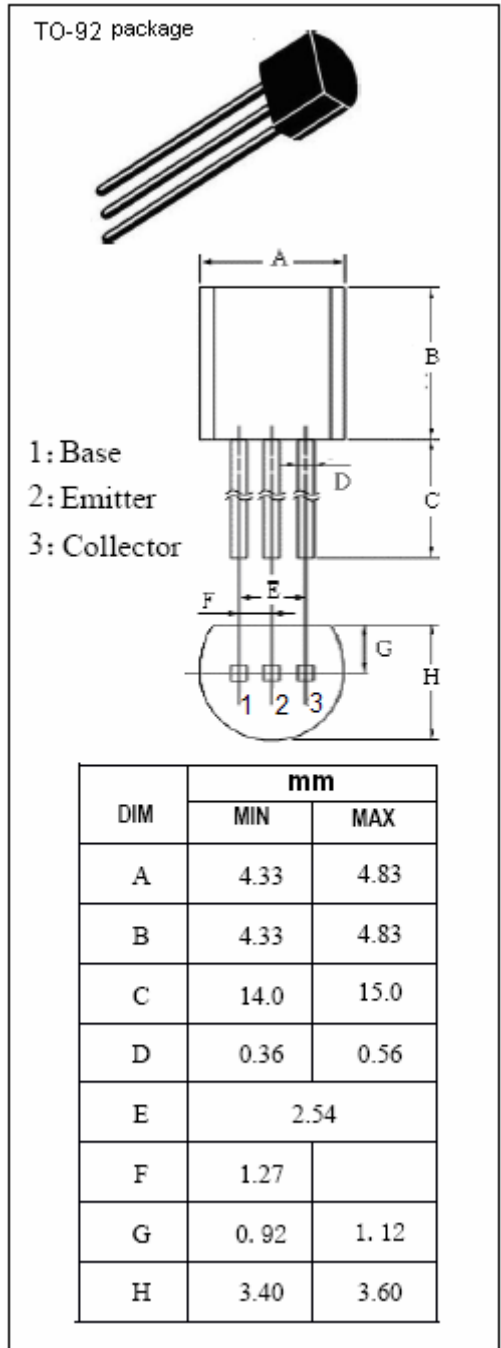
- Low Noise
 $NF = 2.4 \text{ dB TYP. ;@ } f = 200 \text{ MHz}$
- High Gain
 $|S_{21e}|^2 = 21 \text{ dB TYP. ;@ } f = 200 \text{ MHz}$

APPLICATIONS

- Designed for use in high frequency wide band amplifier.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	35	V
V _{CEO}	Collector-Emitter Voltage	18	V
V _{EBO}	Emitter-Base Voltage	3	V
I _C	Collector Current-Continuous	150	mA
P _C	Collector Power Dissipation @T _C =25°C	0.6	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C



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ELECTRICAL CHARACTERISTICS

 $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I_{CBO}	Collector Cutoff Current	$V_{CB}=20\text{V}; I_E=0$			0.5	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=2\text{V}; I_C=0$			0.5	μA
h_{FE}	DC Current Gain	$I_C=50\text{mA}; V_{CE}=10\text{V}$	30		200	
f_T	Current-Gain—Bandwidth Product	$I_C=50\text{mA}; V_{CE}=10\text{V}$		3.5		GHz
C_{OB}	Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f=1.0\text{MHz}$		1.25	2.0	pF
$ S_{21e} ^2$	Insertion Power Gain	$I_C=50\text{mA}; V_{CE}=10\text{V}; f=200\text{MHz}; R_G=50\Omega$	18	21		dB
NF	Noise Figure	$I_C=30\text{mA}; V_{CE}=10\text{V}; f=200\text{MHz}; R_G=50\Omega$		2.4	4.0	dB