

**DESCRIPTION**

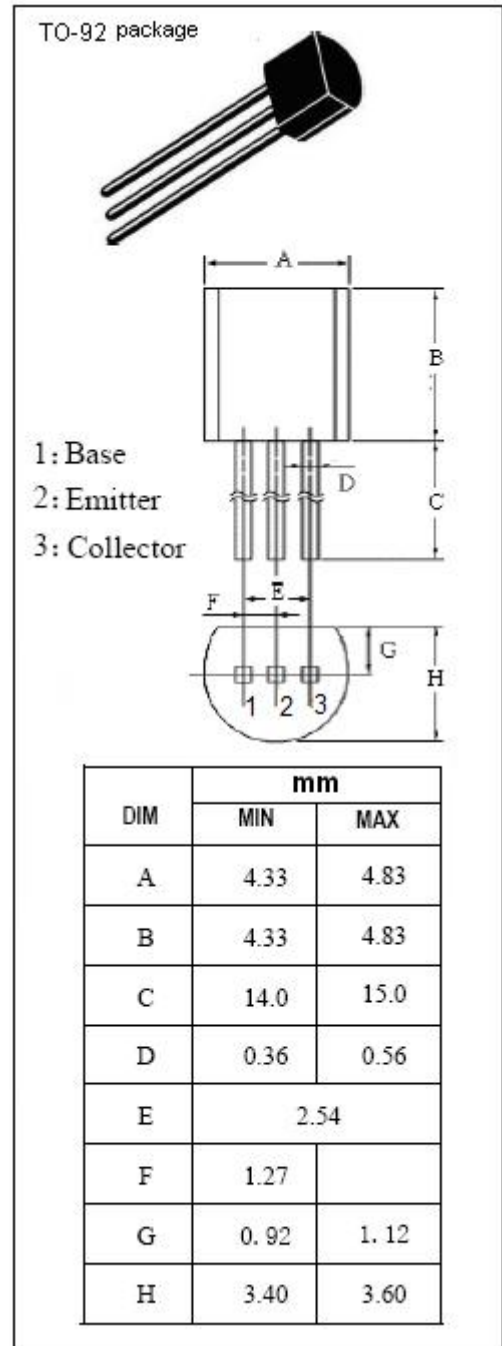
- Low Noise  
NF = 2.4 dB TYP. ;@ f = 200 MHz
- High Gain  
| S<sub>21e</sub> |<sup>2</sup> = 21 dB TYP. ;@ f = 200 MHz
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

**APPLICATIONS**

- Designed for use in high frequency wide band amplifier.

**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	35	V
V <sub>CEO</sub>	Collector-Emitter Voltage	18	V
V <sub>EBO</sub>	Emitter-Base Voltage	3	V
I <sub>C</sub>	Collector Current-Continuous	150	mA
P <sub>C</sub>	Collector Power Dissipation @T <sub>C</sub> =25°C	0.6	W
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C



## isc Silicon NPN RF Transistor

## 2SC2408

## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
I <sub>CB0</sub>	Collector Cutoff Current	V <sub>CB</sub> = 20V; I <sub>E</sub> = 0			0.5	μ A
I <sub>EB0</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 2V; I <sub>C</sub> = 0			0.5	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 50mA ; V <sub>CE</sub> = 10V	30		200	
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>C</sub> = 50mA ; V <sub>CE</sub> = 10V		3.5		GHz
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0 ; V <sub>CB</sub> = 10V; f= 1.0MHz		1.25	2.0	pF
S <sub>21e</sub>   <sup>2</sup>	Insertion Power Gain	I <sub>C</sub> = 50mA ; V <sub>CE</sub> = 10V; f= 200MHz; R <sub>G</sub> = 50 Ω	18	21		dB
NF	Noise Figure	I <sub>C</sub> = 30mA ; V <sub>CE</sub> = 10V; f= 200MHz; R <sub>G</sub> = 50 Ω		2.4	4.0	dB

**NOTICE:**

ISC reserves the rights to make changes of the content herein the datasheet at any time without notification. The information contained herein is presented only as a guide for the applications of our products.

ISC products are intended for usage in general electronic equipment. The products are not designed for use in equipment which require specialized quality and/or reliability, or in equipment which could have applications in hazardous environments, aerospace industry, or medical field. Please contact us if you intend our products to be used in these special applications.

ISC makes no warranty or guarantee regarding the suitability of its products for any particular purpose, nor does ISC assume any liability arising from the application or use of any products, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages.