

# 2SC4308

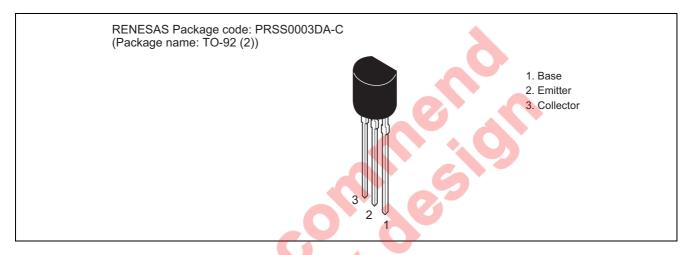
## Silicon NPN Epitaxial Planar

REJ03G0723-0200 (Previous ADE-208-1103) Rev.2.00 Aug.10.2005

### **Application**

VHF Wide band amplifier

### **Outline**



## **Absolute Maximum Ratings**

 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Ratings	Unit
Collector to base voltage	V <sub>CBO</sub>	30	V
Collector to emitter voltage	V <sub>CEO</sub>	20	V
Emitter to base voltage	V <sub>EBO</sub>	3	V
Collector current	Ic	300	mA
Collector peak current	i <sub>C (peak)</sub>	500	mA
Collector power dissipation	P <sub>C</sub>	600	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55 to +150	°C

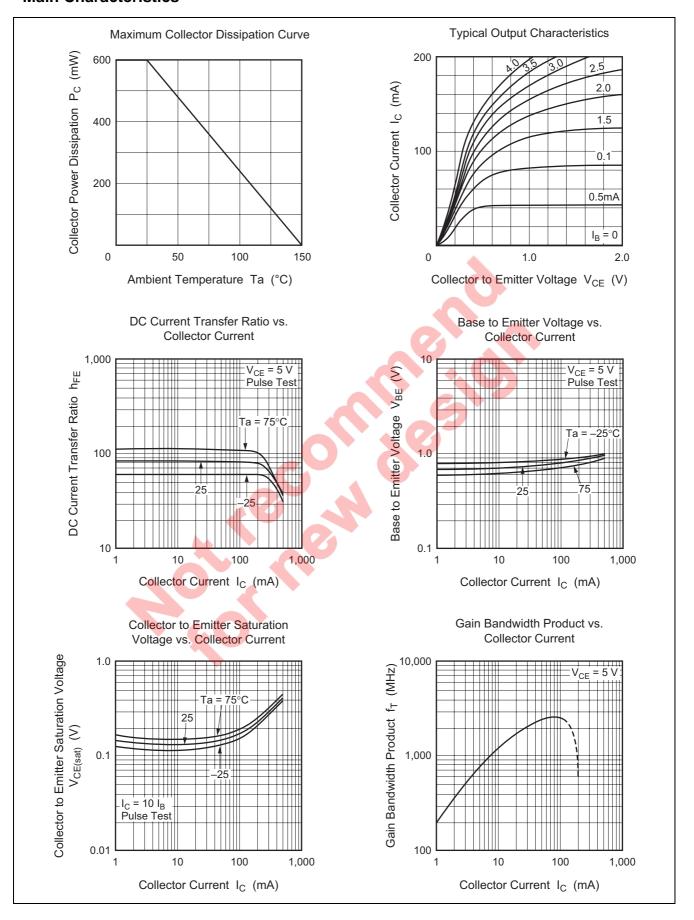
### **Electrical Characteristics**

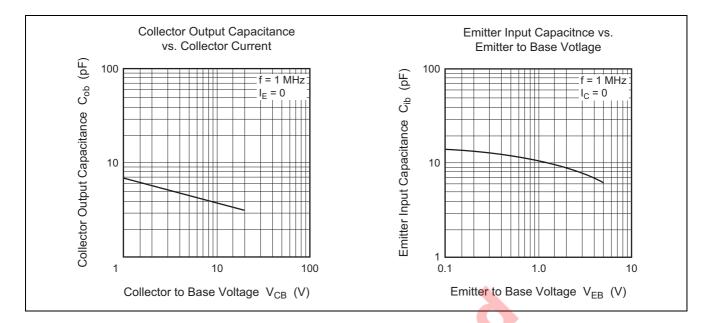
 $(Ta = 25^{\circ}C)$ 

Item	Symbol	Min	Тур	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	30	_	_	V	$I_C = 100  \mu A,  I_E = 0$
Collector to emitter breakdown voltage	V <sub>(BR)CEO</sub>	20	_	_	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Collector cutoff current	I <sub>CBO</sub>	_	_	1	μΑ	$V_{CB} = 25 \text{ V}, I_E = 0$
Emitter cutoff current	I <sub>EBO</sub>	_	_	10	μΑ	$V_{EB} = 3 \text{ V}, I_{E} = 0$
DC current transfer ratio	h <sub>FE</sub>	50	_	200		$V_{CE} = 5 \text{ V}, I_{C} = 50 \text{ mA}$
Gain bandwidth product	f⊤	1.5	2.5	_	GHz	$V_{CE} = 5 \text{ V}, I_{C} = 50 \text{ mA}$
Collector output capacitance	Cob	_	4.0	_	pF	V <sub>CB</sub> = 10 V, I <sub>E</sub> = 0, f = 1 MHz

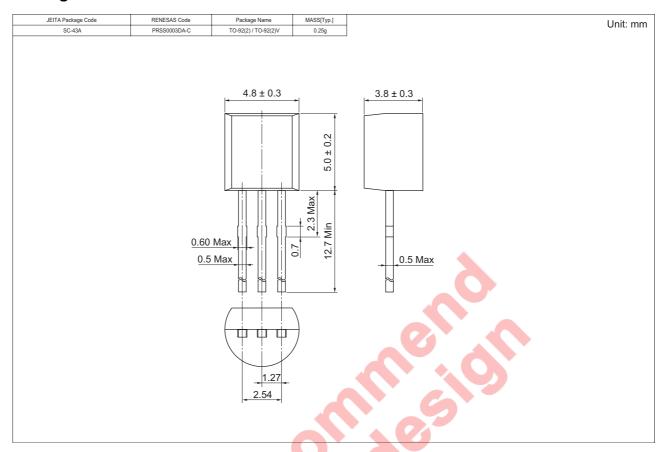


#### **Main Characteristics**





## **Package Dimensions**



## **Ordering Information**

Part Name	Quantity		Shipping Container
2SC4308TZ-E	2500	Hold E	Box, Radial Taping

Note: For some grades, production may be terminated. Please contact the Renesas sales office to check the state of production before ordering the product.



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