

2SC4308

Silicon NPN Epitaxial Planar

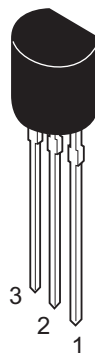
REJ03G0723-0200
(Previous ADE-208-1103)
Rev.2.00
Aug.10.2005

Application

VHF Wide band amplifier

Outline

RENESAS Package code: PRSS0003DA-C
(Package name: TO-92 (2))



- 1. Base
- 2. Emitter
- 3. Collector

Absolute Maximum Ratings

(Ta = 25°C)

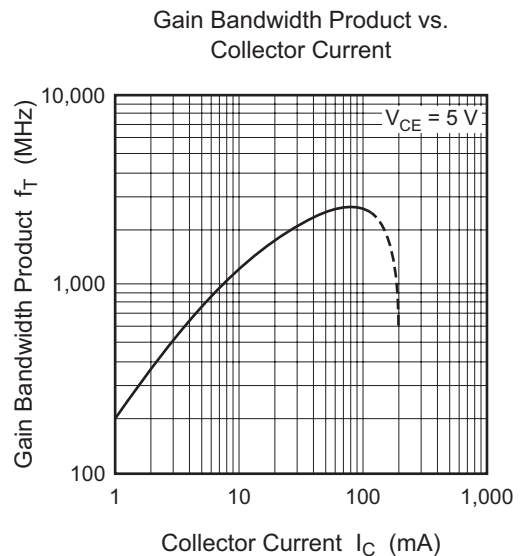
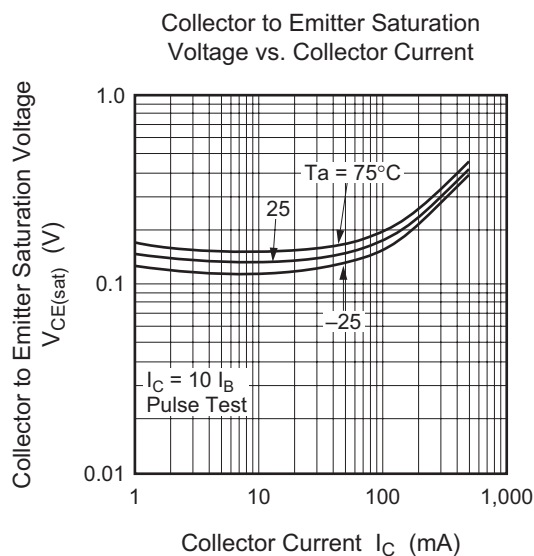
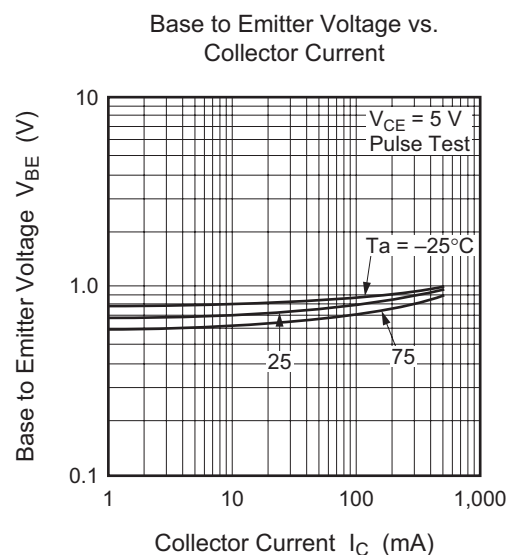
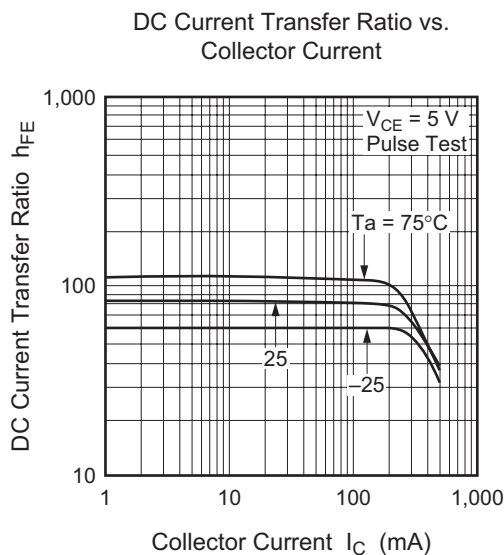
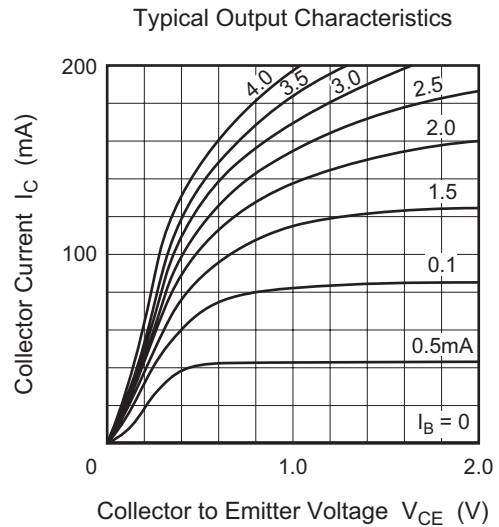
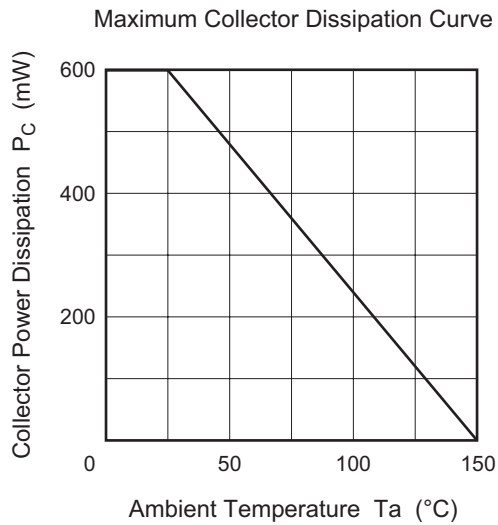
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	30	V
Collector to emitter voltage	V_{CEO}	20	V
Emitter to base voltage	V_{EBO}	3	V
Collector current	I_C	300	mA
Collector peak current	$i_{C (peak)}$	500	mA
Collector power dissipation	P_C	600	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

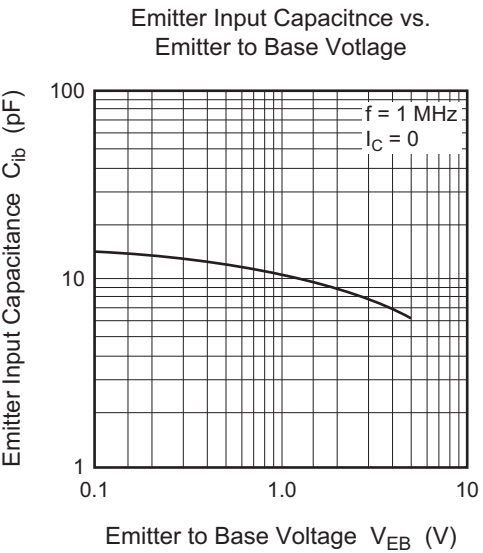
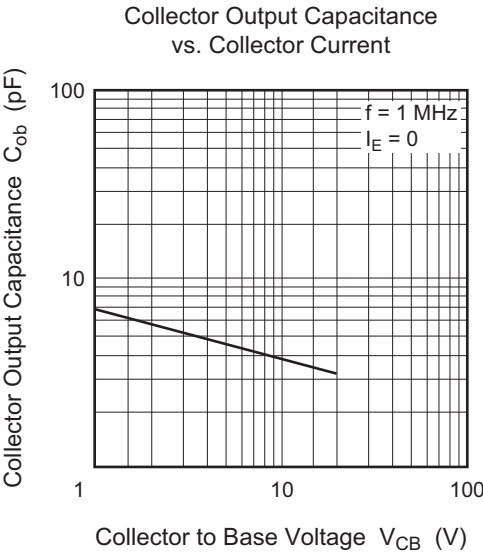
Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	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	$V_{(BR)CEO}$	20	—	—	V	$I_C = 1\ mA, R_{BE} = \infty$
Collector cutoff current	I_{CBO}	—	—	1	μA	$V_{CB} = 25\ V, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	10	μA	$V_{EB} = 3\ V, I_E = 0$
DC current transfer ratio	h_{FE}	50	—	200		$V_{CE} = 5\ V, I_C = 50\ mA$
Gain bandwidth product	f_T	1.5	2.5	—	GHz	$V_{CE} = 5\ V, I_C = 50\ mA$
Collector output capacitance	C_{ob}	—	4.0	—	pF	$V_{CB} = 10\ V, I_E = 0, f = 1\ MHz$

Main Characteristics





Package Dimensions

JEITA Package Code	RENESAS Code	Package Name	MASS[Typ.]	Unit: mm
SC-43A	PRSS0003DA-C	TO-92(2) / TO-92(2)V	0.25g	

The drawing illustrates the mechanical specifications of the 2SC4308 TO-92 package. The top view shows a rectangular body with a width of 4.8 ± 0.3 mm and a height of 5.0 ± 0.2 mm. The side view shows a width of 3.8 ± 0.3 mm and a total height of 12.7 mm, with a maximum lead height of 2.3 mm and a minimum lead height of 0.7 mm. The bottom view shows a circular base with a diameter of 2.54 mm and a central pin diameter of 1.27 mm. The lead thickness is specified as 0.60 mm maximum and 0.5 mm maximum. The lead length is 0.5 mm maximum.

Ordering Information

Part Name	Quantity	Shipping Container
2SC4308TZ-E	2500	Hold 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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