

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)

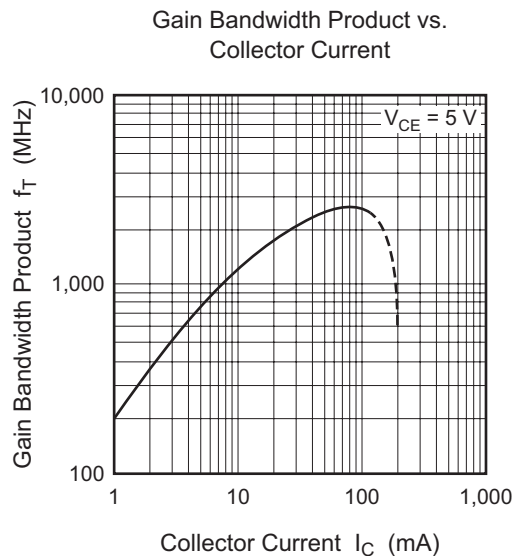
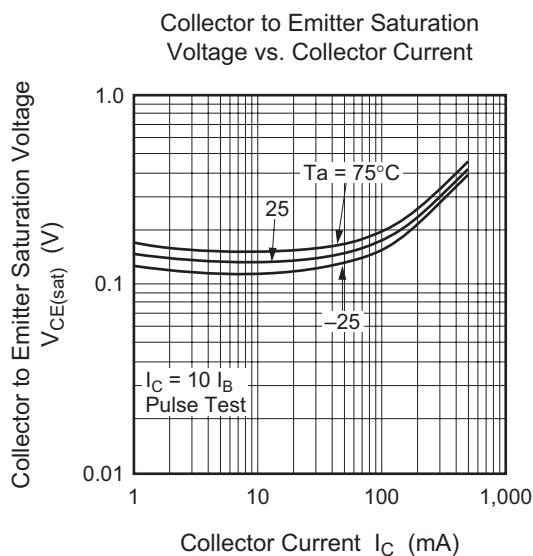
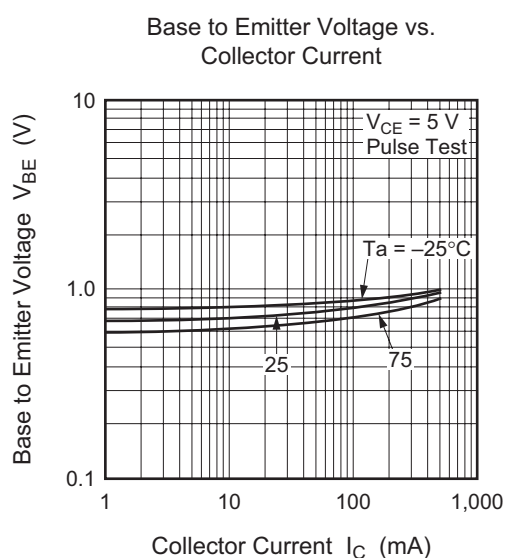
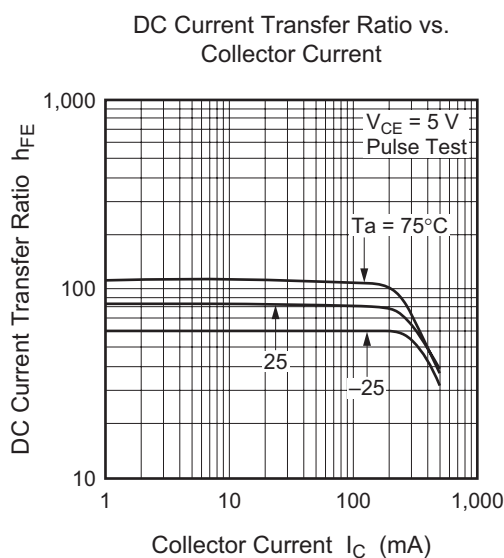
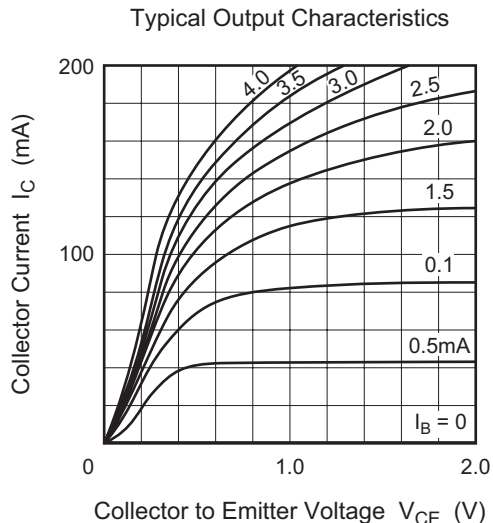
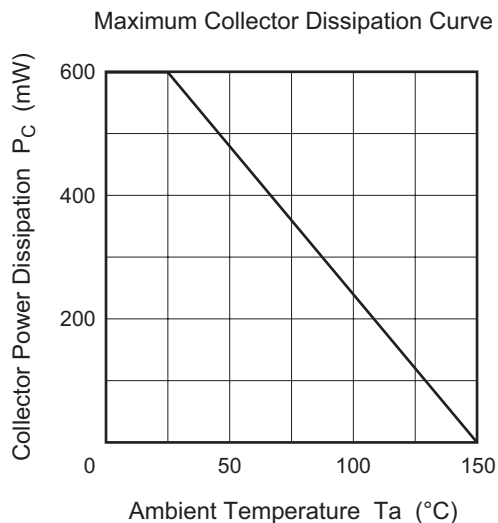
Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	30	V
Collector to emitter voltage	V_{CEO}	20	V
Emitter to base voltage	V_{EBO}	3	V
Collector current	I_C	300	mA
Collector peak current	$i_{C (peak)}$	500	mA
Collector power dissipation	P_C	600	mW
Junction temperature	T_j	150	°C
Storage temperature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

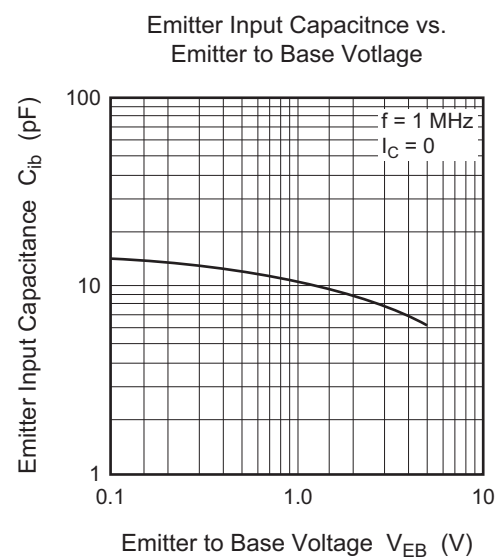
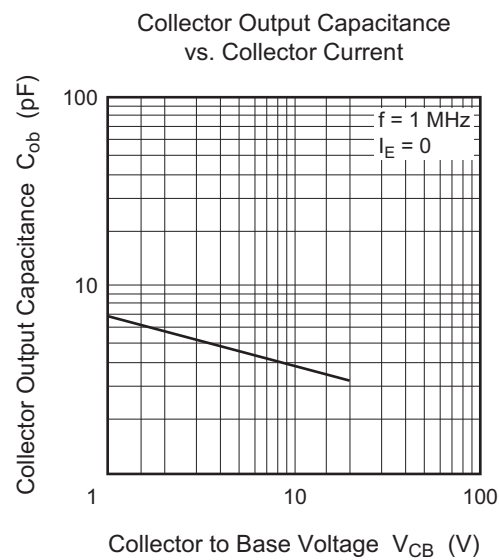
Electrical Characteristics

(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. Lead dimensions include a maximum width of 0.60 mm and a maximum thickness of 0.5 mm.

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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