Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: http://www.renesas.com

April 1st, 2010 Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (http://www.renesas.com)

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2SC4308

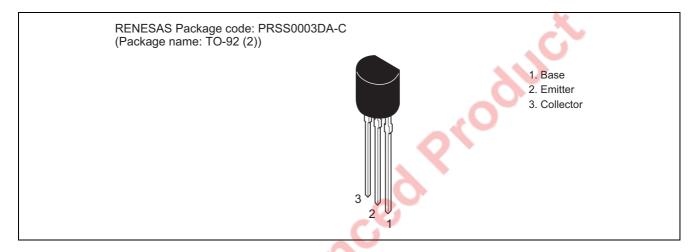
Silicon NPN Epitaxial Planar

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_{CBO} | 30 | V |
| Collector to emitter voltage | $V_{\sf CEO}$ | 20 | V |
| Emitter to base voltage | V_{EBO} | 3 | V |
| Collector current | Ic | 300 | mA |
| Collector peak current | i _{C (peak)} | 500 | mA |
| Collector power dissipation | Pc | 600 | mW |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | Tstg | -55 to +150 | °C |

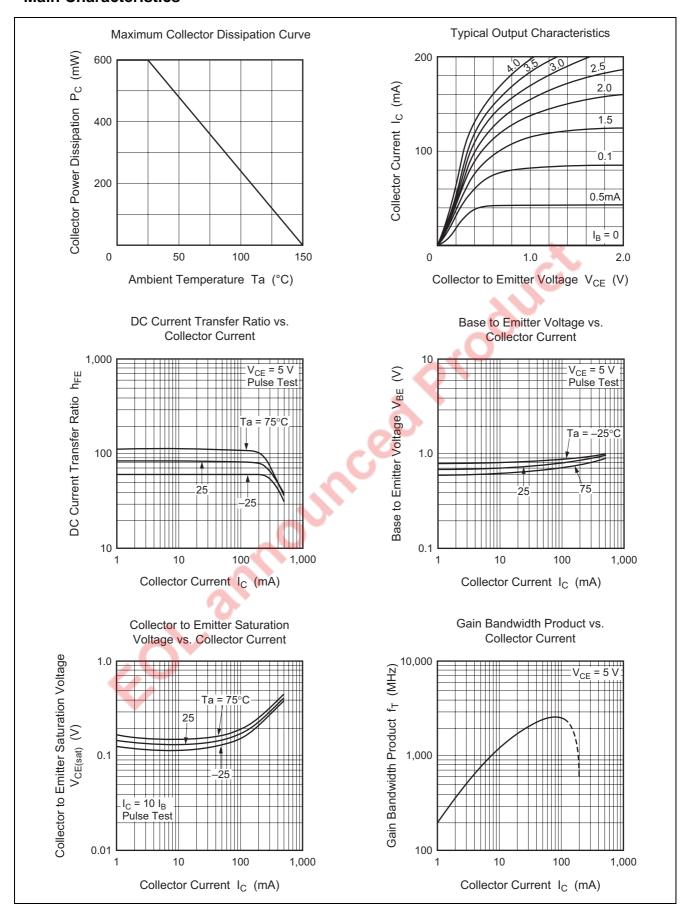
Electrical Characteristics

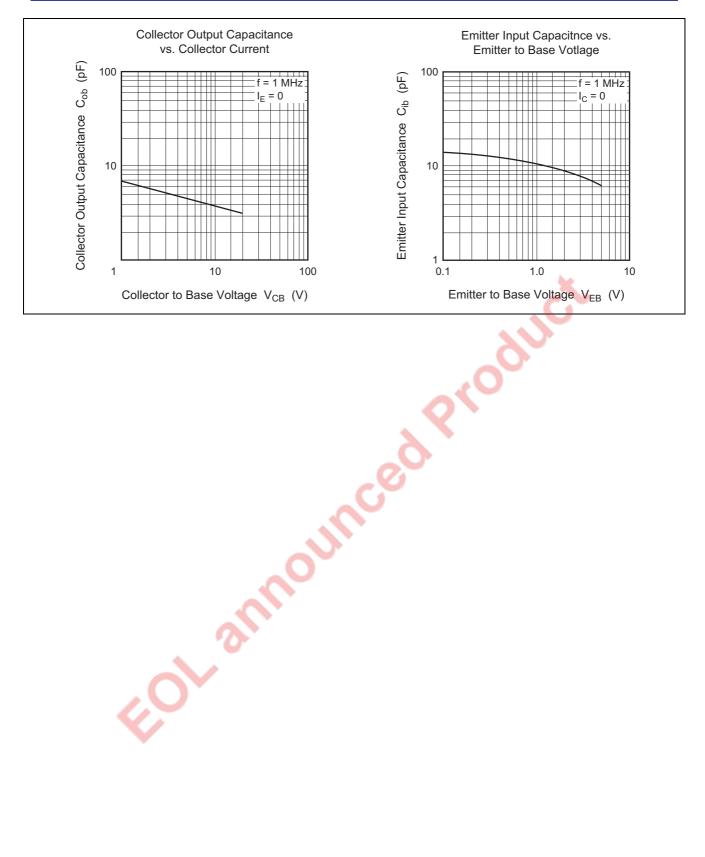
 $(Ta = 25^{\circ}C)$

| 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 | $V_{(BR)CEO}$ | 20 | _ | _ | V | $I_C = 1 \text{ mA}, R_{BE} = \infty$ |
| Collector cutoff current | I _{CBO} | _ | _ | 1 | μΑ | $V_{CB} = 25 \text{ V}, I_E = 0$ |
| Emitter cutoff current | I _{EBO} | _ | _ | 10 | μΑ | $V_{EB} = 3 \text{ V}, I_{E} = 0$ |
| DC current transfer ratio | h _{FE} | 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 | _ | рF | $V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ |

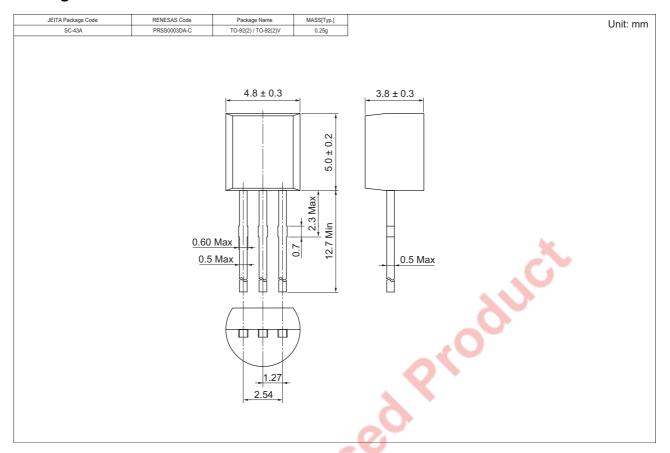


Main Characteristics





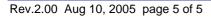
Package Dimensions



Ordering Information

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

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