

2SC1515(K)

Silicon NPN Triple Diffused

REJ03G0689-0200
(Previous ADE-208-1055)
Rev.2.00
Aug.10.2005

Application

High voltage switching

Outline

RENESAS Package code: PRSS0003DA-A
(Package name: TO-92 (1))

1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings

(Ta = 25°C)

| Item | Symbol | Ratings | Unit |
|------------------------------|------------------|-------------|------|
| Collector to base voltage | V _{CB0} | 200 | V |
| Collector to emitter voltage | V _{CES} | 200 | V |
| | V _{CEO} | 150 | V |
| Emitter to base voltage | V _{EBO} | 5 | V |
| Collector current | I _C | 50 | mA |
| Collector power dissipation | P _C | 200 | mW |
| Junction temperature | T _j | 150 | °C |
| Storage temperature | T _{stg} | -55 to +150 | °C |

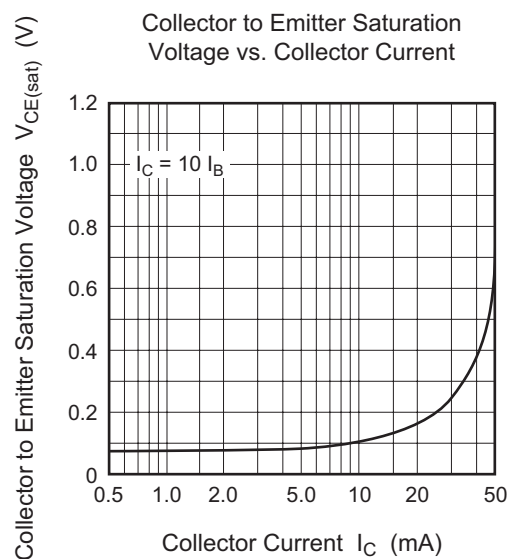
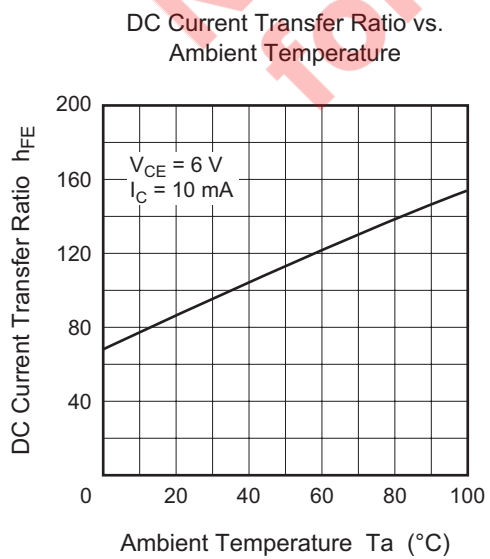
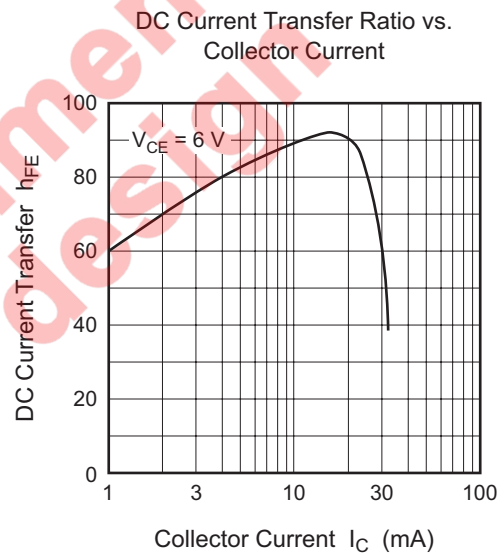
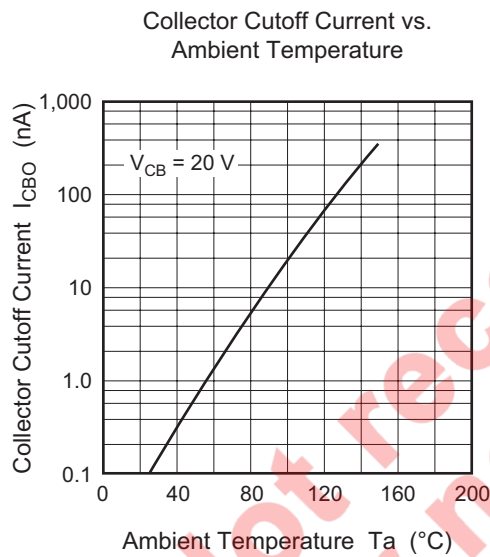
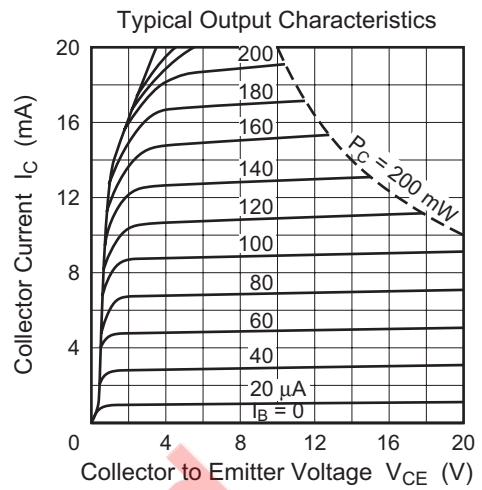
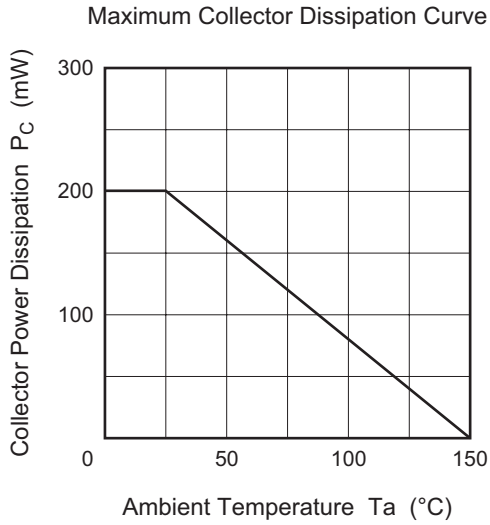
Electrical Characteristics

(Ta = 25°C)

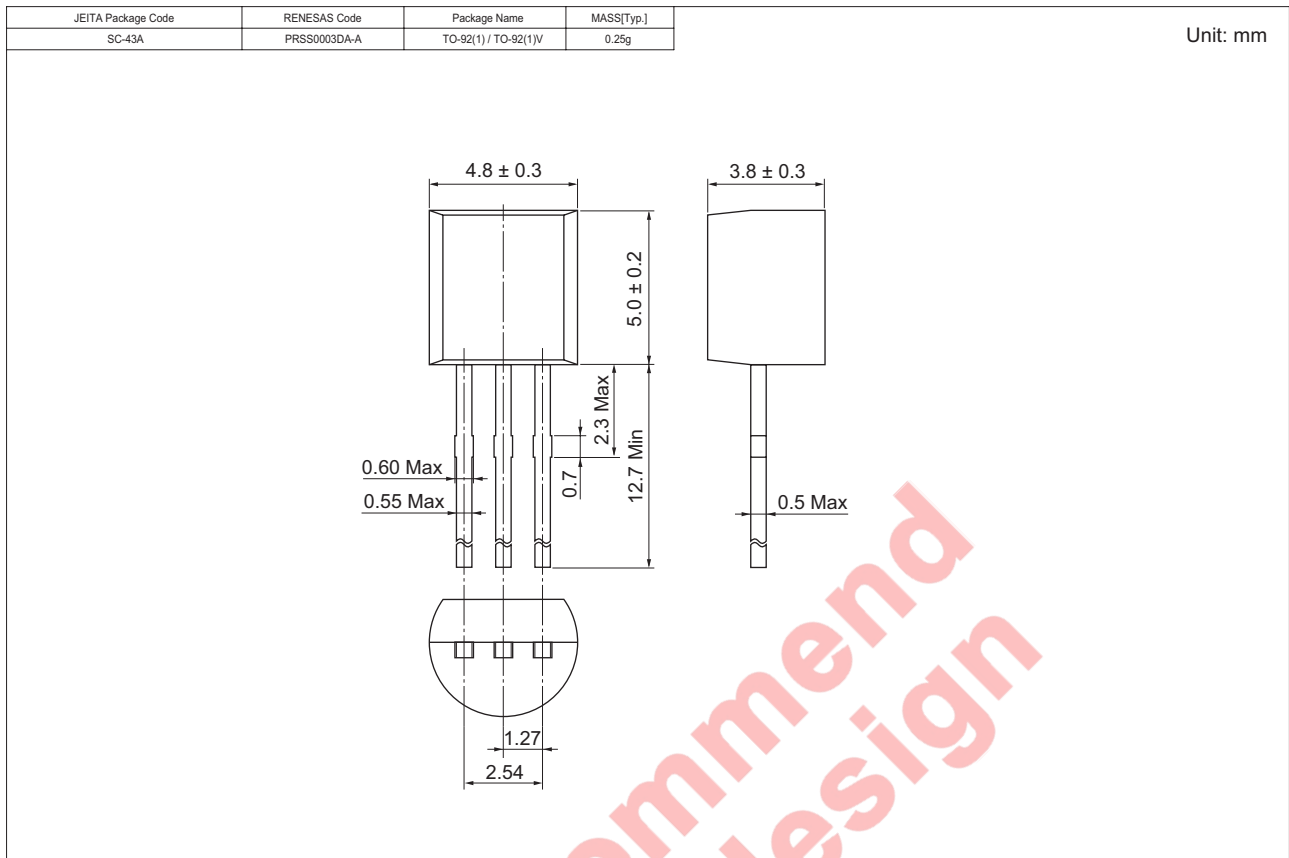
| Item | Symbol | Min | Typ | Max | Unit | Test conditions |
|---|---------------|-----|-----|-----|---------|--|
| Collector to emitter breakdown voltage | $V_{(BR)CES}$ | 200 | — | — | V | $I_C = 10 \mu A, R_{BE} = 0$ |
| | $V_{(BR)CEO}$ | 150 | — | — | V | $I_C = 1 \text{ mA}, R_{BE} = \infty$ |
| Emitter to base breakdown voltage | $V_{(BR)EBO}$ | 5 | — | — | V | $I_E = 10 \mu A, I_C = 0$ |
| Collector cutoff current | I_{CBO} | — | — | 0.1 | μA | $V_{CB} = 20 \text{ V}, I_E = 0$ |
| DC current transfer ratio | h_{FE} | 30 | — | 300 | | $V_{CE} = 6 \text{ V}, I_C = 10 \text{ mA}$ |
| Collector to emitter saturation voltage | $V_{CE(sat)}$ | — | — | 1.0 | V | $I_C = 10 \text{ mA}, I_B = 1 \text{ mA}$ |
| Base to emitter saturation voltage | $V_{BE(sat)}$ | — | — | 1.5 | V | $I_C = 10 \text{ mA}, I_B = 1 \text{ mA}$ |
| Gain bandwidth product | f_T | 60 | — | — | MHz | $V_{CE} = 6 \text{ V}, I_C = 10 \text{ mA}$ |
| Collector output capacitance | C_{ob} | — | — | 10 | pF | $V_{CB} = 6 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ |

Not recommend
for new design

Main Characteristics



Package Dimensions



Ordering Information

| Part Name | Quantity | Shipping Container |
|------------|----------|-------------------------|
| 2SC1515KTZ | 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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