

To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

Cautions

Keep safety first in your circuit designs!

1. Renesas Technology Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage.

Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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2SC4265

Silicon NPN Epitaxial

RENESAS

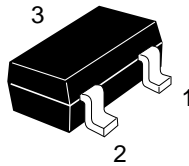
ADE-208-1102A (Z)
2nd. Edition
Mar. 2001

Application

VHF RF amplifier, Local oscillator, Mixer

Outline

CMPAK



1. Emitter
2. Base
3. Collector

Note: Marking is "JC".

Absolute Maximum Ratings (Ta = 25°C)

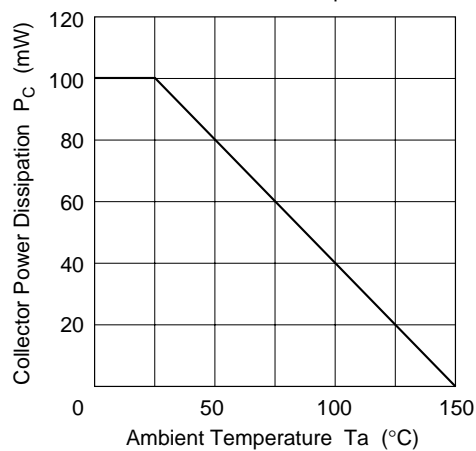
| Item | Symbol | Ratings | Unit |
|------------------------------|-----------|-------------|------|
| Collector to base voltage | V_{CBO} | 30 | V |
| Collector to emitter voltage | V_{CEO} | 20 | V |
| Emitter to base voltage | V_{EBO} | 3 | V |
| Collector current | I_C | 50 | mA |
| Collector power dissipation | P_C | 100 | 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 | $I_C = 10 \mu A, I_E = 0$ |
| Collector to emitter breakdown voltage | $V_{(BR)CEO}$ | 20 | — | — | V | $I_C = 1 \text{ mA}, R_{BE} =$ |
| Collector cutoff current | I_{CBO} | — | — | 0.5 | μA | $V_{CE} = 15 \text{ V}, I_E = 0$ |
| Emitter cutoff current | I_{EBO} | — | — | 10 | μA | $V_{EB} = 3 \text{ V}, I_C = 0$ |
| Collector to emitter saturation voltage | $V_{CE(sat)}$ | — | — | 1.0 | V | $I_C = 20 \text{ mA}, I_B = 4 \text{ mA}$ |
| DC current transfer ratio | h_{FE} | 40 | — | — | | $V_{CE} = 10 \text{ V}, I_C = 10 \text{ mA}$ |
| Collector output capacitance | C_{ob} | — | — | 1.5 | pF | $V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$ |
| Gain bandwidth product | f_T | 600 | — | — | MHz | $V_{CE} = 10 \text{ V}, I_C = 10 \text{ mA}$ |

See characteristic curves of 2SC2735.

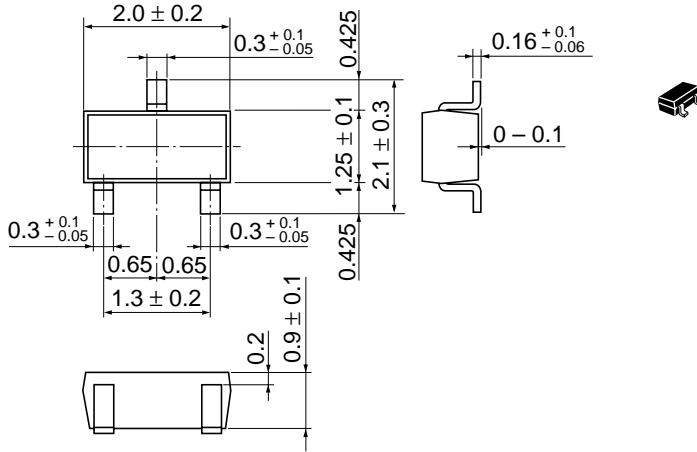
Maximum Collector Dissipation Curve



Package Dimensions

As of January, 2001

Unit: mm



| | |
|------------------------|----------|
| Hitachi Code | CMPAK |
| JEDEC | — |
| EIAJ | Conforms |
| Mass (reference value) | 0.006 g |

Cautions

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