

HIT647

Silicon PNP Epitaxial

REJ03G1504-0200
Rev.2.00
Mar 05, 2007

Features

- Low frequency power amplifier
- Complementary pair with HIT667

Outline

RENESAS Package code: PRSS0003DC-A
(Package name: TO-92 Mod)



1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings

(Ta = 25°C)

| Item | Symbol | Ratings | Unit |
|------------------------------|---------------------|-------------|------|
| Collector to base voltage | V_{CBO} | -120 | V |
| Collector to emitter voltage | V_{CEO} | -100 | V |
| Emitter to base voltage | V_{EBO} | -6 | V |
| Collector current | I_C | -1.0 | A |
| Collector peak current | $I_{C (peak)}^{*1}$ | -2.0 | A |
| Collector power dissipation | P_C | 0.9 | W |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

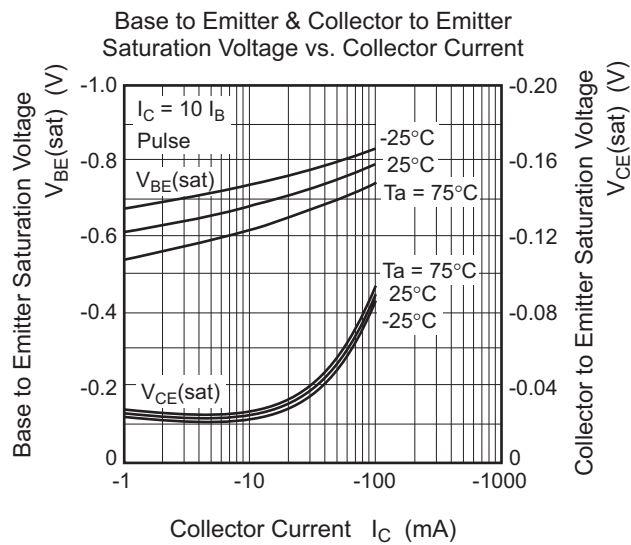
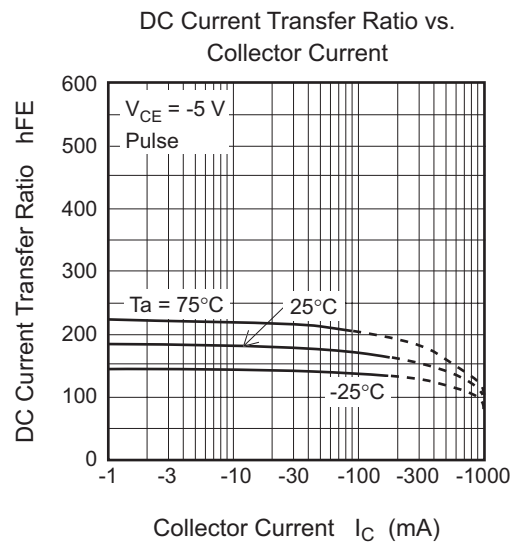
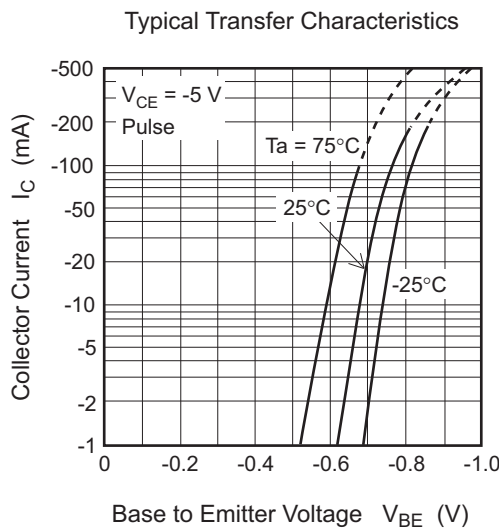
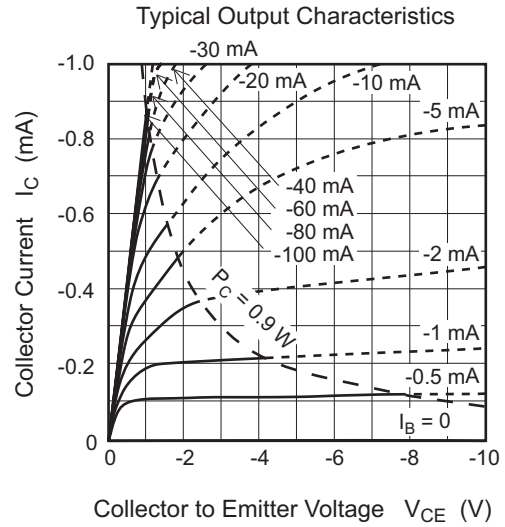
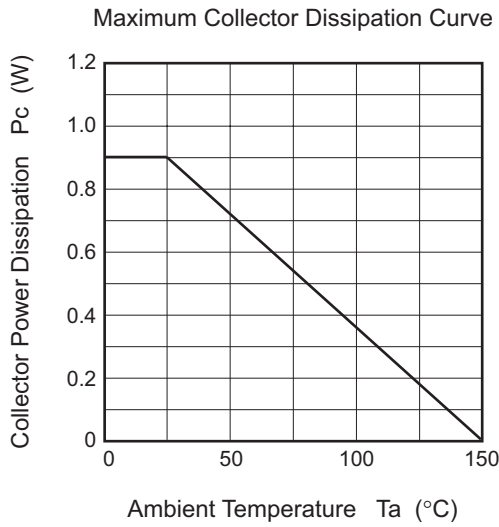
Note : 1. PW ≤ 10 ms, Duty cycle ≤ 20%

Electrical Characteristics

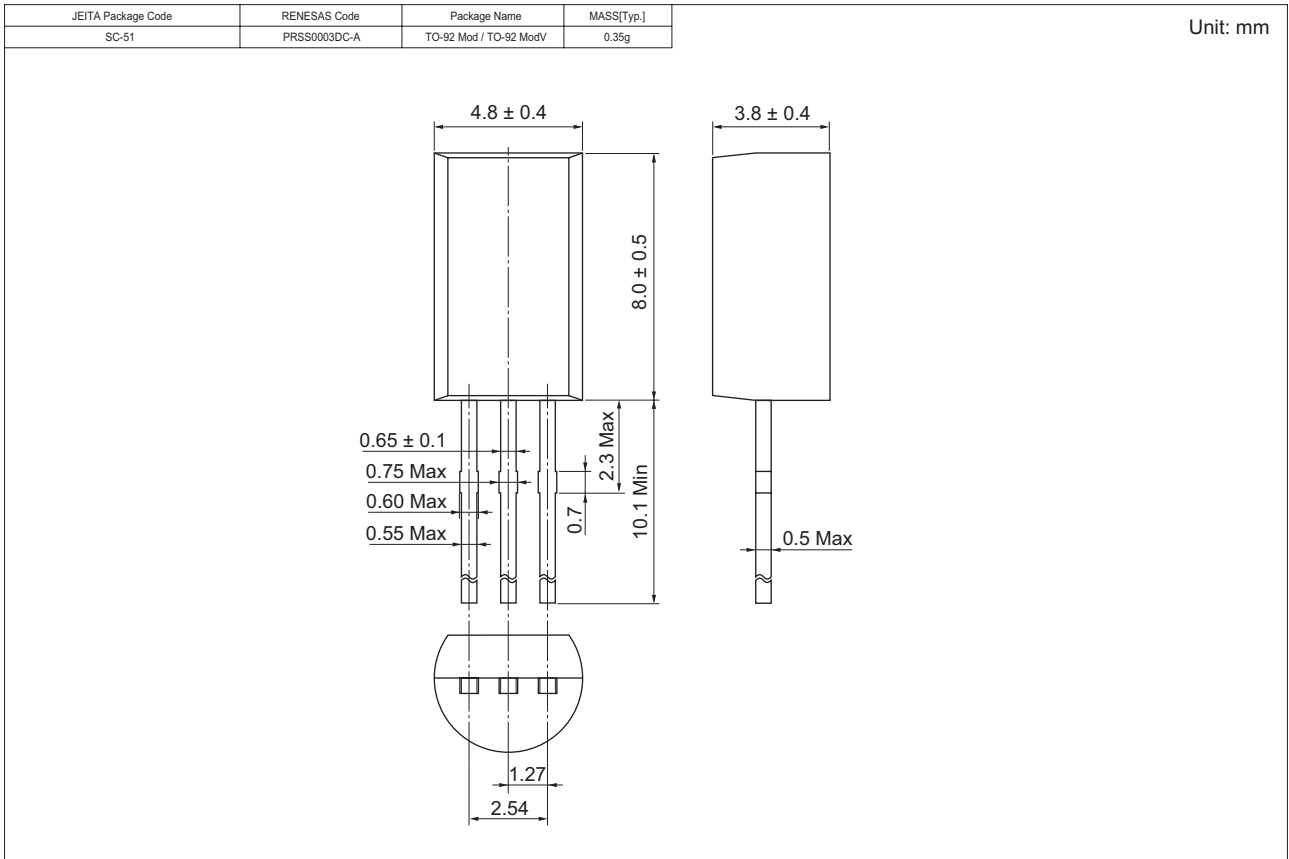
(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test conditions |
|---|---------------|------|-----|------|------|--|
| Collector to base breakdown voltage | $V_{(BR)CBO}$ | -120 | — | — | V | $I_C = -100 \mu A, I_E = 0$ |
| Collector to emitter breakdown voltage | $V_{(BR)CEO}$ | -100 | — | — | V | $I_C = -10 \text{ mA}, R_{BE} = \infty$ |
| Emitter to base breakdown voltage | $V_{(BR)EBO}$ | -6 | — | — | V | $I_E = -100 \mu A, I_C = 0$ |
| Collector cutoff current | I_{CBO} | — | — | -500 | nA | $V_{CB} = -120 \text{ V}, I_E = 0$ |
| Emitter cutoff current | I_{EBO} | — | — | -500 | nA | $V_{EB} = -6 \text{ V}, I_C = 0$ |
| DC current transfer ratio | h_{FE1} | 140 | — | 350 | — | $V_{CE} = -2 \text{ V}, I_C = -150 \text{ mA}$ |
| | h_{FE2} | 40 | — | — | — | $V_{CE} = -5 \text{ V}, I_C = -1 \text{ A}$ |
| Collector to emitter saturation voltage | $V_{CE(sat)}$ | — | — | -0.5 | V | $I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$ |
| Base to emitter saturation voltage | $V_{BE(sat)}$ | — | — | -1.1 | V | $I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$ |

Main Characteristics



Package Dimensions



Ordering Information

| Part Name | Quantity | Shipping Container |
|-------------|----------|-------------------------|
| HIT647-EQ | 2500 pcs | Bulk, Vinyl Bag |
| HIT647TZ-EQ | 2500 pcs | Hold Box, Radial Taping |

Note: This product is designed for consumer use and not for automotive.

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