

# **HIT667**

# WWW.DZSC.GOM Silicon NPN Epitaxial

REJ03G1505-0200 Rev.2.00 Mar 05, 2007

### **Features**

- Low frequency power amplifier
- Complementary pair with HIT647

### **Outline**



## **Absolute Maximum Ratings**

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

| Item                         | Symbol                   | Ratings     | Unit |
|------------------------------|--------------------------|-------------|------|
| Collector to base voltage    | V <sub>CBO</sub>         | 120         | V    |
| Collector to emitter voltage | $V_{CEO}$                | 100         | V    |
| Emitter to base voltage      | V <sub>EBO</sub>         | 6           | V    |
| Collector current            | I <sub>C</sub>           | 1.0         | А    |
| Collector peak current       | I <sub>C (peak)</sub> *1 | 2.0         | A    |
| Collector power dissipation  | P <sub>C</sub>           | 0.9         | W    |
| Junction temperature         | Tj                       | 150         | °C   |
| Storage temperature          | Tstg                     | -55 to +150 | °C   |

Note : 1. PW  $\leq$  10 ms, Duty cycle  $\leq$  20%

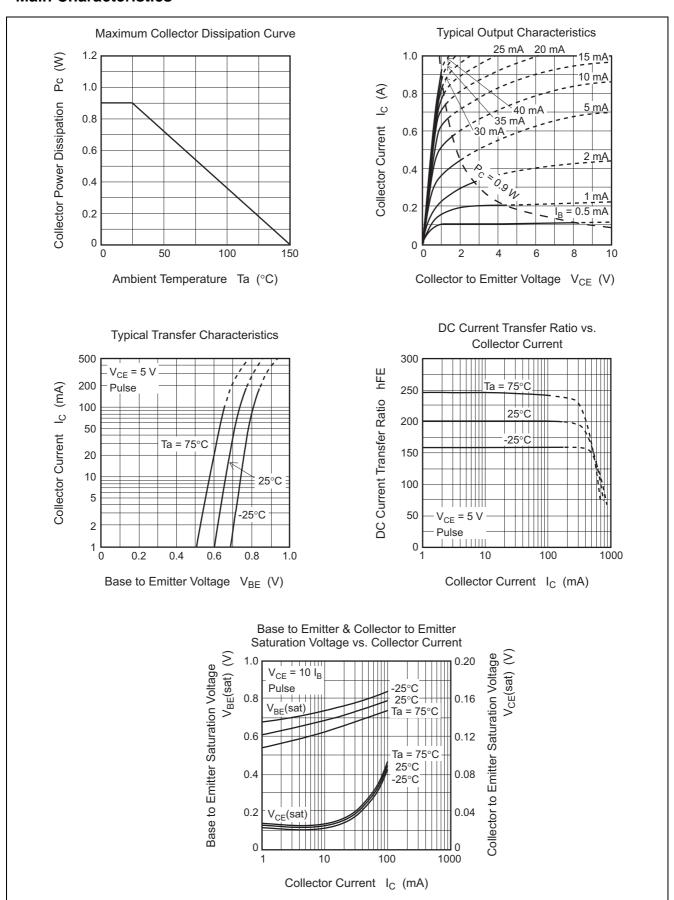


## **Electrical Characteristics**

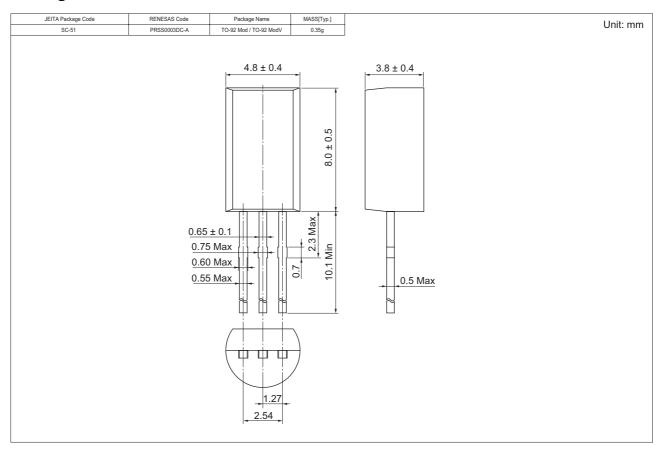
 $(Ta = 25^{\circ}C)$ 

| Item                                    | Symbol               | Min | Тур | Max | Unit | Test conditions                                |
|-----------------------------------------|----------------------|-----|-----|-----|------|------------------------------------------------|
| Collector to base breakdown voltage     | V <sub>(BR)CBO</sub> | 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 <sub>CBO</sub>     | _   | _   | 500 | nA   | $V_{CB} = 120 \text{ V}, I_{E} = 0$            |
| Emitter cutoff current                  | I <sub>EBO</sub>     | _   | _   | 500 | nA   | $V_{EB} = 6 \text{ V}, I_{C} = 0$              |
| DC current transfer ratio               | h <sub>FE1</sub>     | 140 | _   | 330 | _    | $V_{CE} = 2 \text{ V}, I_{C} = 150 \text{ mA}$ |
|                                         | h <sub>FE2</sub>     | 40  | _   | _   | _    | $V_{CE} = 5 \text{ V}, I_{C} = 1 \text{ A}$    |
| Collector to emitter saturation voltage | V <sub>CE(sat)</sub> | _   | _   | 0.5 | V    | $I_C = 500 \text{ mA}, I_B = 50 \text{ mA}$    |
| Base to emitter saturation voltage      | V <sub>BE(sat)</sub> | _   | _   | 1.1 | V    | $I_C = 500 \text{ mA}, I_B = 50 \text{ mA}$    |

### **Main Characteristics**



# **Package Dimensions**



# **Ordering Information**

| Part Name   | Quantity | Shipping Container      |  |
|-------------|----------|-------------------------|--|
| HIT667-EQ   | 2500 pcs | Bulk, Vinyl Bag         |  |
| HIT667TZ-EQ | 2500 pcs | Hold Box, Radial Taping |  |

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

Renesas Technology Corp. Sales Strategic Planning Div. Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

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Renesas Technology Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

Renesas Technology (Shanghai) Co., Ltd.
Unit 204, 205, AZIACenter, No.1233 Lujiazui Ring Rd, Pudong District, Shanghai, China 200120 Tel: <86> (21) 5877-1818, Fax: <86> (21) 6887-7898

Renesas Technology Hong Kong Ltd.
7th Floor, North Tower, World Finance Centre, Harbour City, 1 Canton Road, Tsimshatsui, Kowloon, Hong Kong Tel: <852> 2265-6688, Fax: <852> 2730-6071

**Renesas Technology Taiwan Co., Ltd.**10th Floor, No.99, Fushing North Road, Taipei, Taiwan Tel: <886> (2) 2715-2888, Fax: <886> (2) 2713-2999

Renesas Technology Singapore Pte. Ltd.
1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632 Tel: <65> 6213-0200, Fax: <65> 6278-8001

Renesas Technology Korea Co., Ltd. Kukje Center Bldg. 18th Fl., 191, 2-ka, Hangang-ro, Yongsan-ku, Seoul 140-702, Korea Tel: <82> (2) 796-3115, Fax: <82> (2) 796-2145

Renesas Technology Malaysia Sdn. Bhd
Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No.18, Jalan Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia Tel: <603> 7955-9390, Fax: <603> 7955-9510

