

# HIT8050-N

Silicon NPN Epitaxial

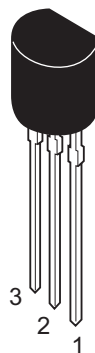
REJ03G1611-0100  
Rev.1.00  
Nov 28, 2007

## Features

- Low frequency power amplifier
- Complementary pair with HIT8550-N

## 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	$V_{CBO}$	45	V
Collector to emitter voltage	$V_{CEO}$	25	V
Emitter to base voltage	$V_{EBO}$	6	V
Collector current	$I_C$	0.7	A
Collector peak current	$I_{C(peak)}$ <sup>Note</sup>	1.0	A
Collector power dissipation	$P_C$	0.625	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

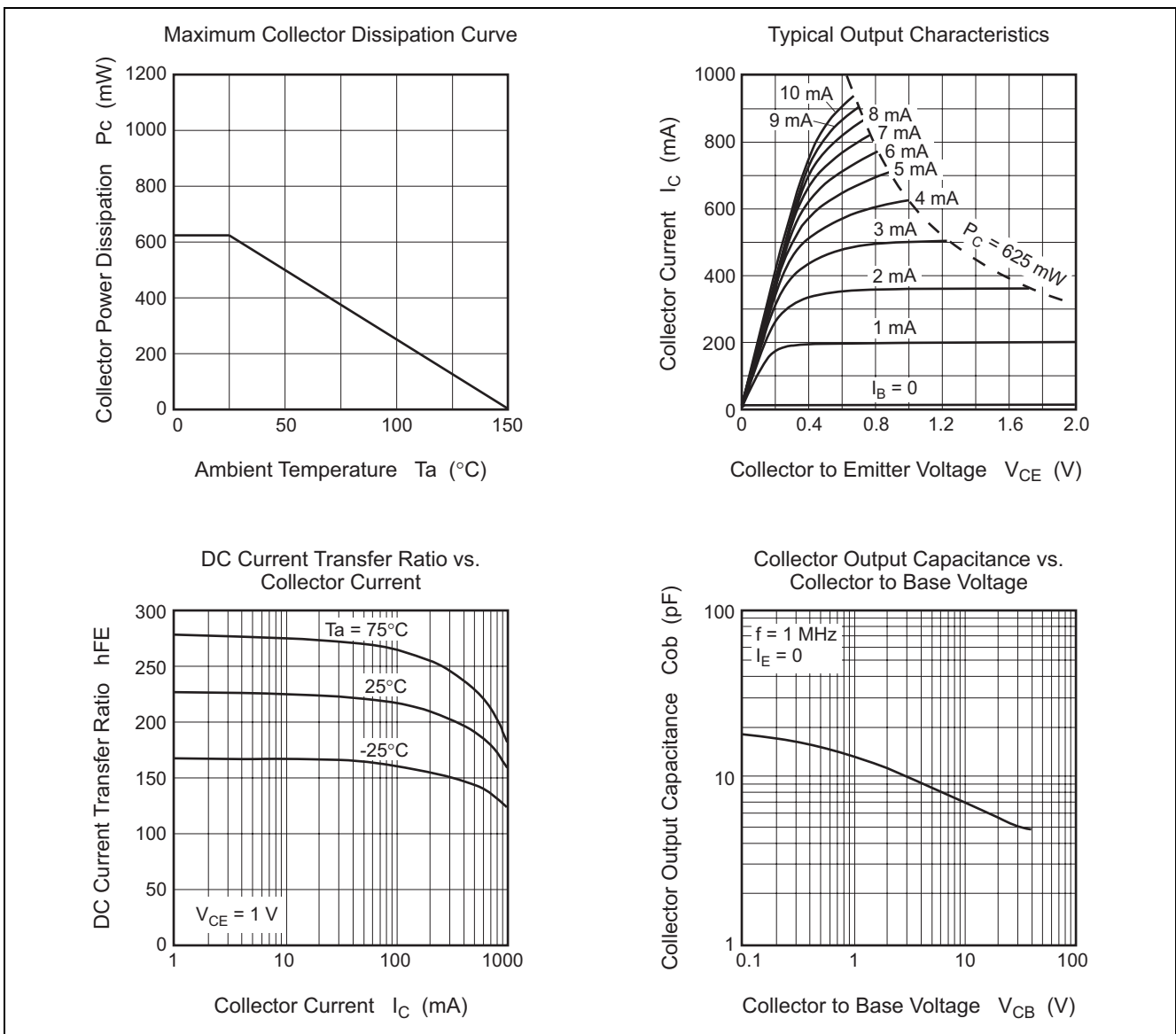
Note: PW ≤ 10 ms, Duty cycle ≤ 20%

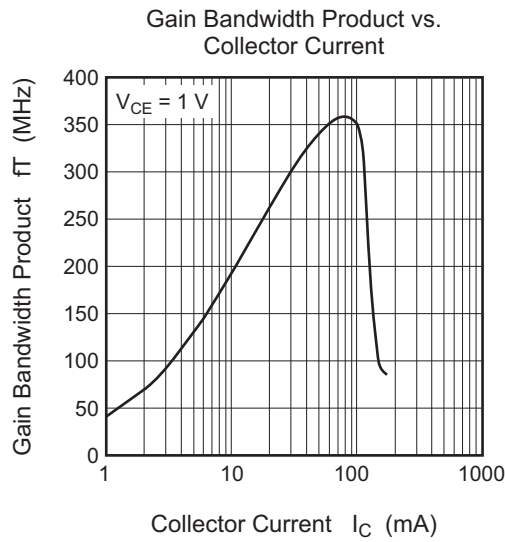
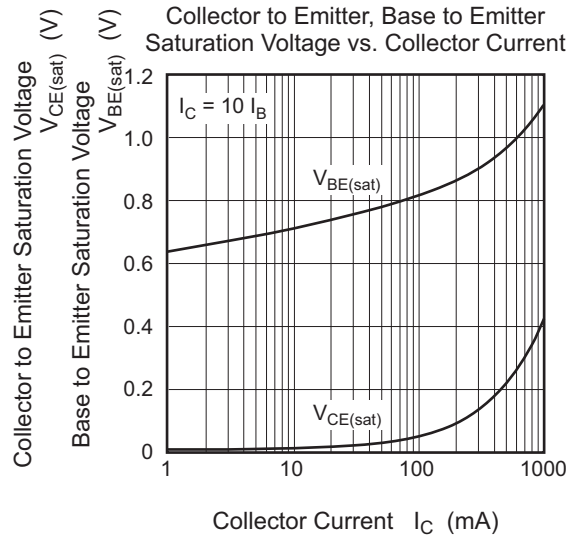
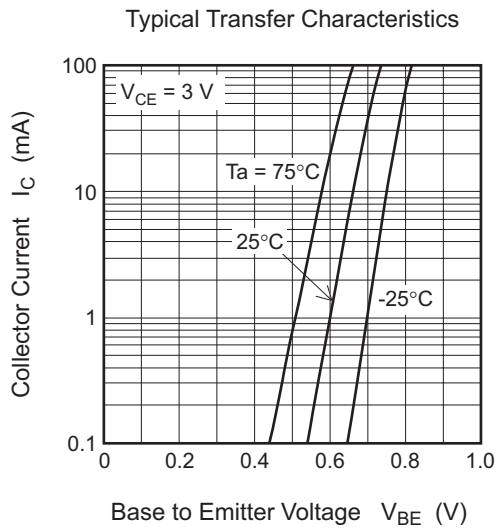
### Electrical Characteristics

(Ta = 25°C)

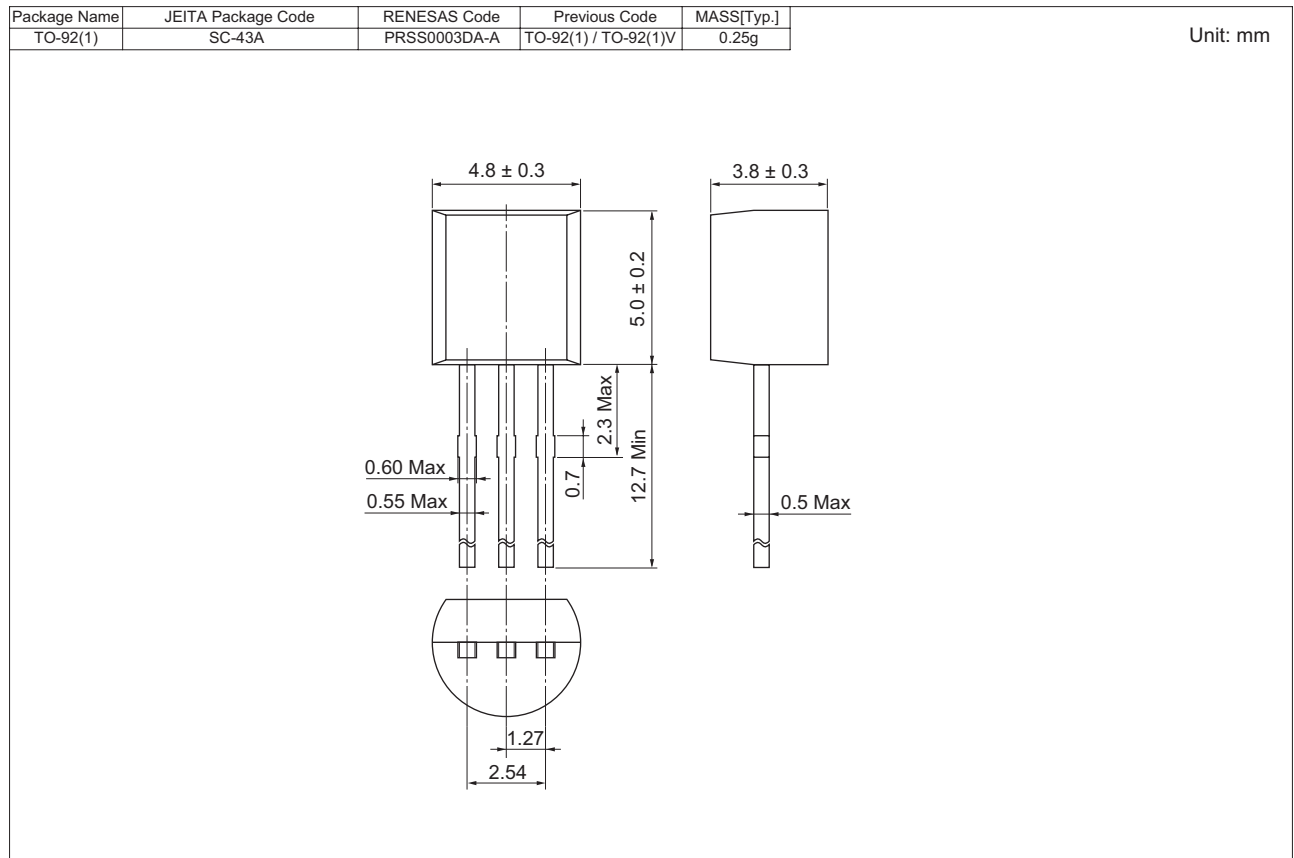
Item	Symbol	Min.	Typ	Max.	Unit	Test Conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	45	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	25	—	—	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	$I_E = 10 \mu A, I_C = 0$
Collector cutoff current	$I_{CBO}$	—	—	500	nA	$V_{CB} = 45 \text{ V}, I_E = 0$
Emitter cutoff current	$I_{EBO}$	—	—	500	nA	$V_{EB} = 6 \text{ V}$
DC current transfer ratio	$h_{FE1}$	45	—	—	—	$V_{CE} = 1 \text{ V}, I_C = 5 \text{ mA}$
DC current transfer ratio	$h_{FE2}$	85	—	330	—	$V_{CE} = 1 \text{ V}, I_C = 100 \text{ mA}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.5	V	$I_C = 500 \text{ mA}, I_B = 50 \text{ mA}$
Base to emitter voltage	$V_{BE(on)}$	—	—	1.0	V	$V_{CE} = 3 \text{ V}, I_C = 10 \text{ mA}$

### Main Characteristics





## Package Dimensions



## Ordering Information

Part Name	Quantity	Shipping Container
HIT8050-N-EQ	2500 pcs.	Bulk, Vinyl Bag
HIT8050-N-TZ-EQ	2500 pcs.	Hold Box, Radial Taping

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

Notes:

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Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

**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

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Tel: <86> (21) 5877-1818, Fax: <86> (21) 6887-7858/7898

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

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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, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia  
Tel: <603> 7955-9390, Fax: <603> 7955-9510