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April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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Not recommended
for new design

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HIT8550-N

Silicon PNP Epitaxial

REJ03G1610-0100
Rev.1.00
Nov 28, 2007

Features

- Low frequency power amplifier
- Complementary pair with HIT8050-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	$I_{C(peak)}$ ^{Note}	-1	A
Collector power dissipation	P_C	0.625	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

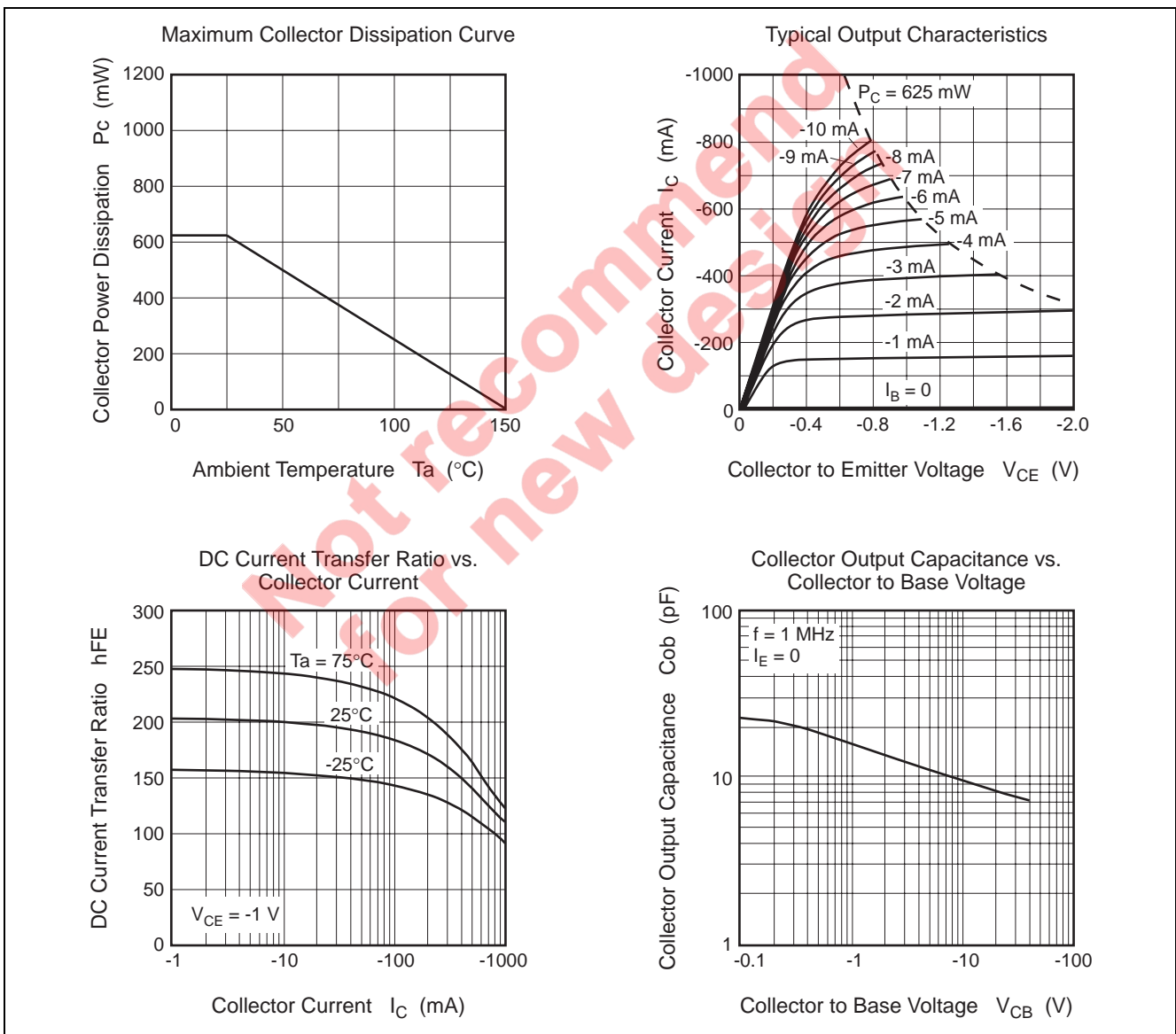
Note: PW ≤ 10 ms, Duty cycle ≤ 20%

Electrical Characteristics

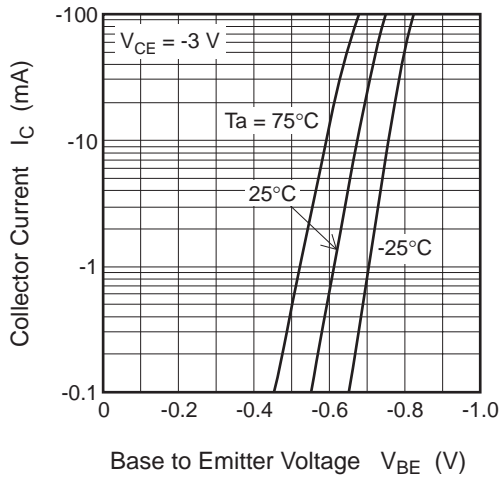
(Ta = 25°C)

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	$V_{CE} = -3 \text{ V}, I_C = -10 \text{ mA}$

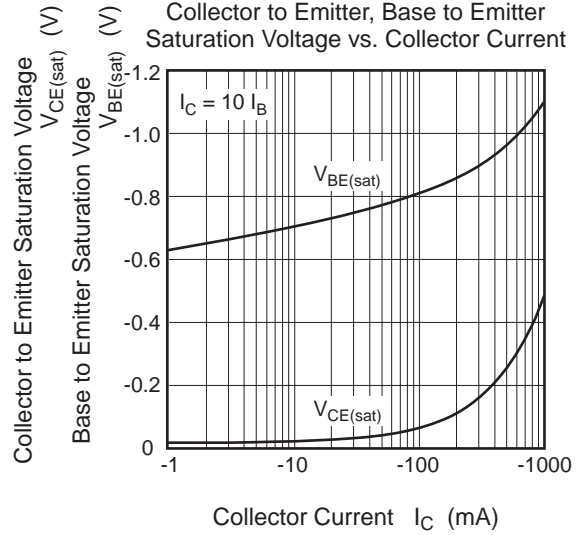
Main Characteristics



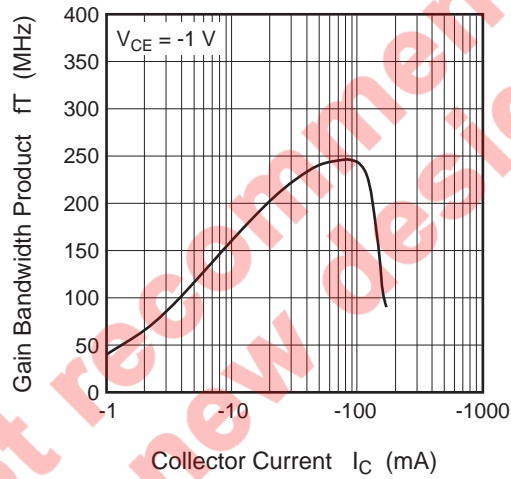
Typical Transfer Characteristics



Collector to Emitter, Base to Emitter Saturation Voltage vs. Collector Current

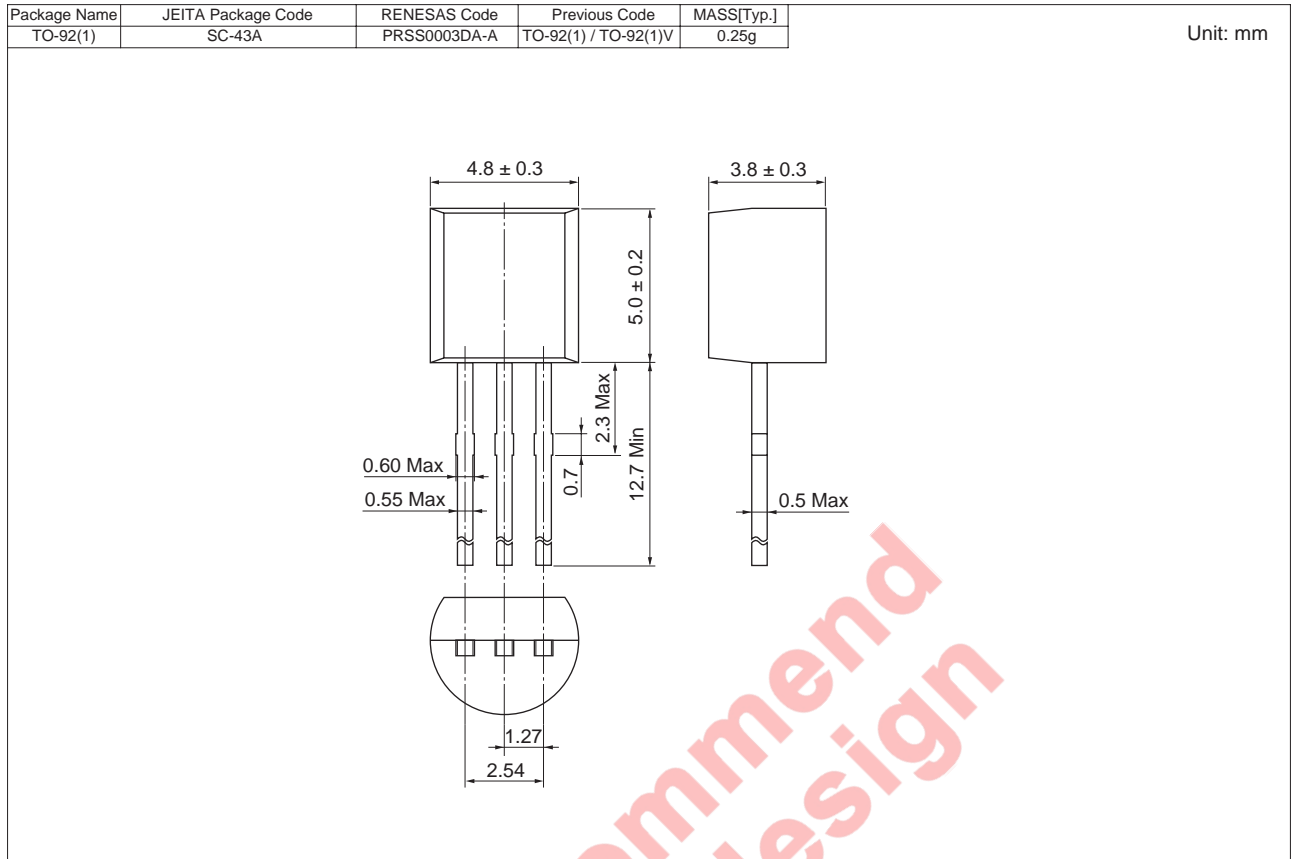


Gain Bandwidth Product vs. Collector Current



Not recommended for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
HIT8550-N-EQ	2500 pcs.	Bulk, Vinyl Bag
HIT8550-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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