

# 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	$I_{C(peak)}$ <sup>Note</sup>	-1	A
Collector power dissipation	$P_C$	0.625	W
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

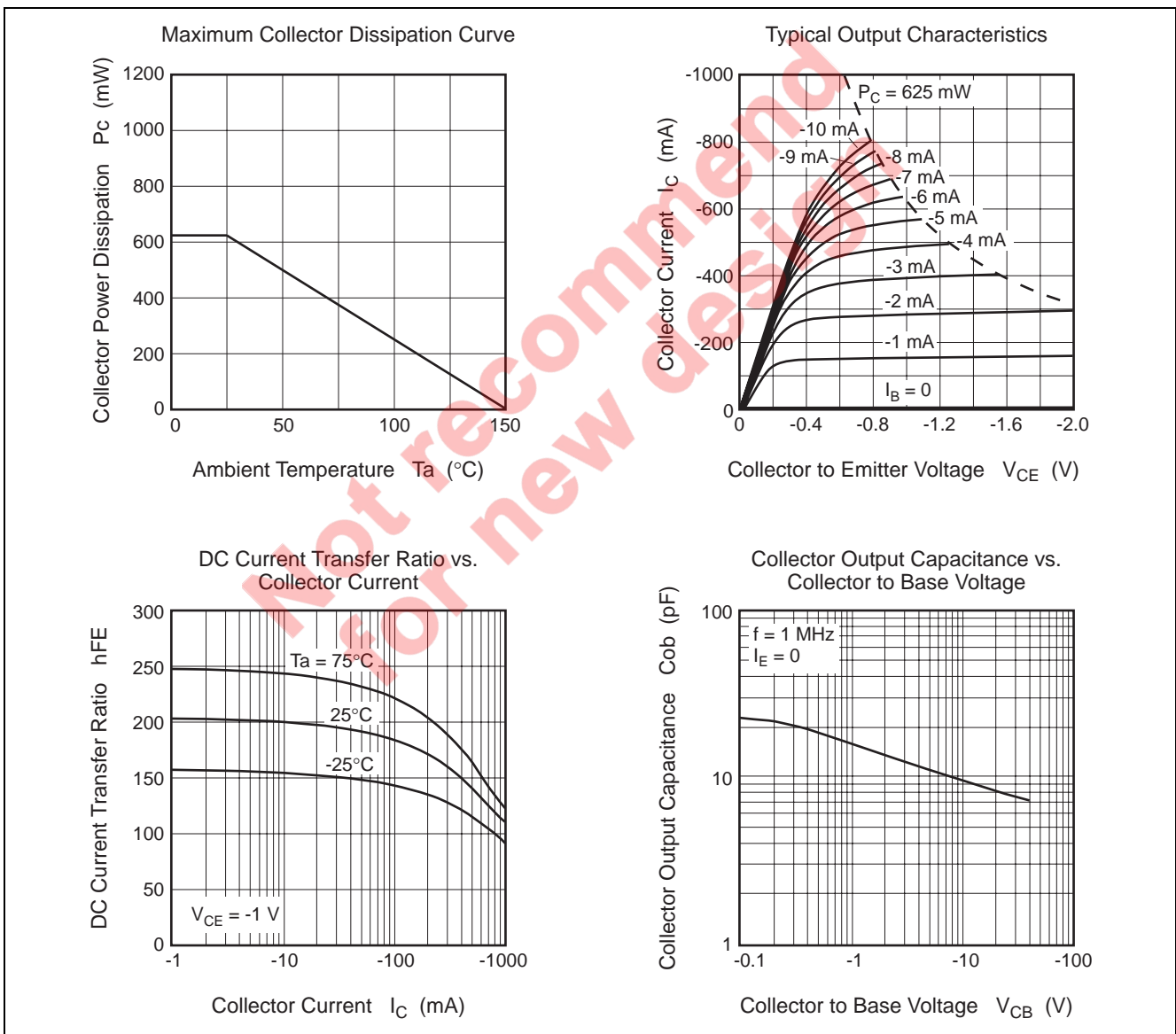
Note: PW ≤ 10 ms, Duty cycle ≤ 20%

Electrical Characteristics

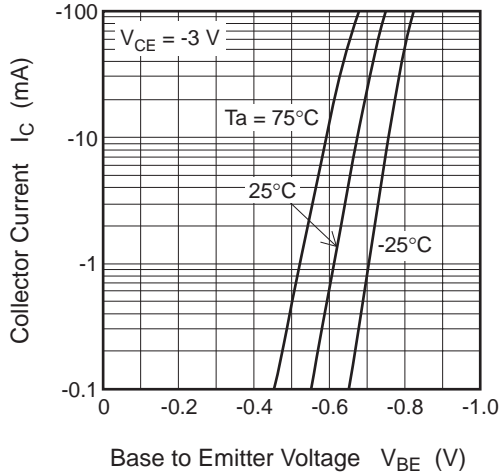
(Ta = 25°C)

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

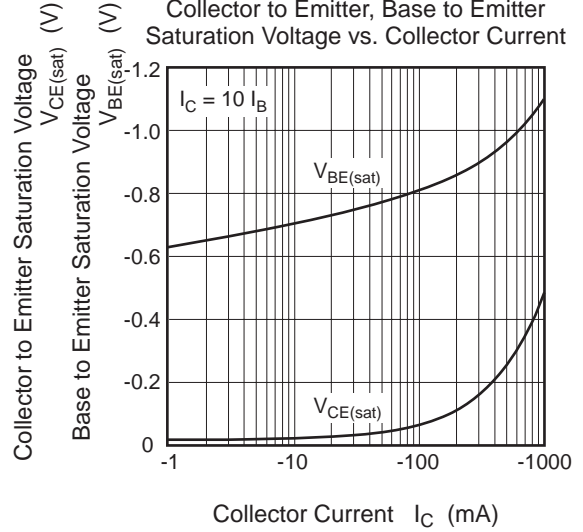
Main Characteristics



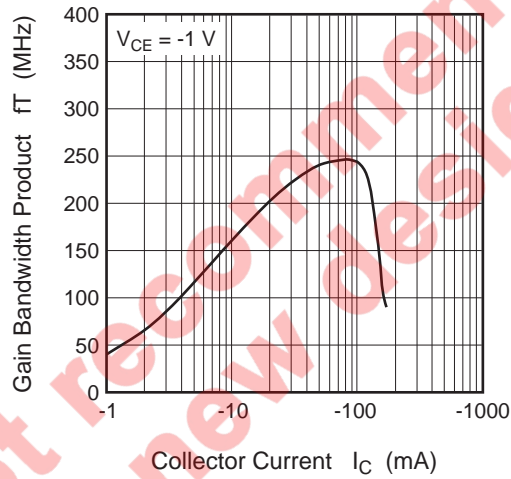
Typical Transfer Characteristics



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

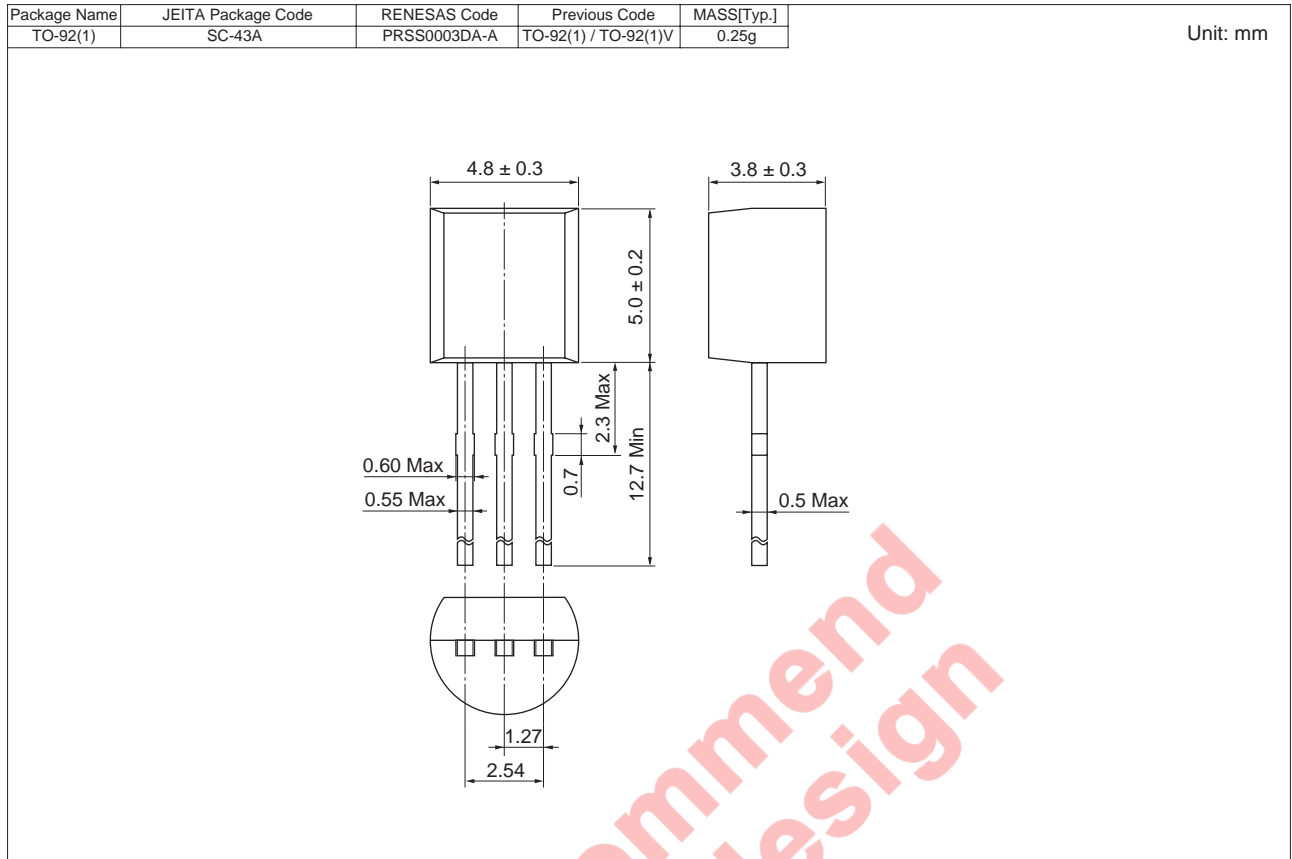


Gain Bandwidth Product vs. Collector Current



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.

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