

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

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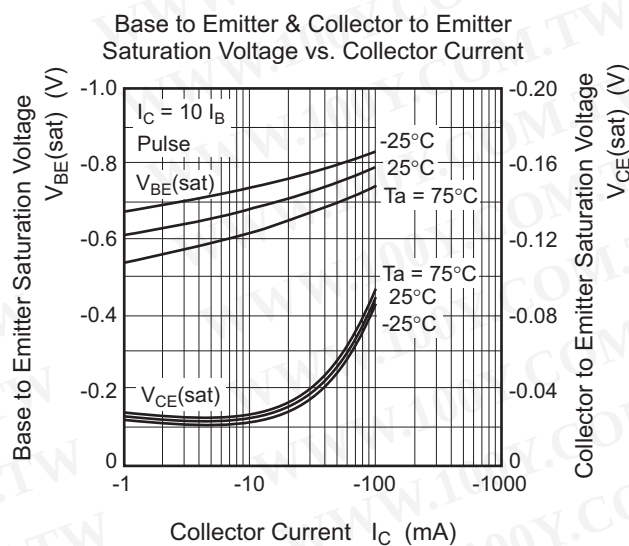
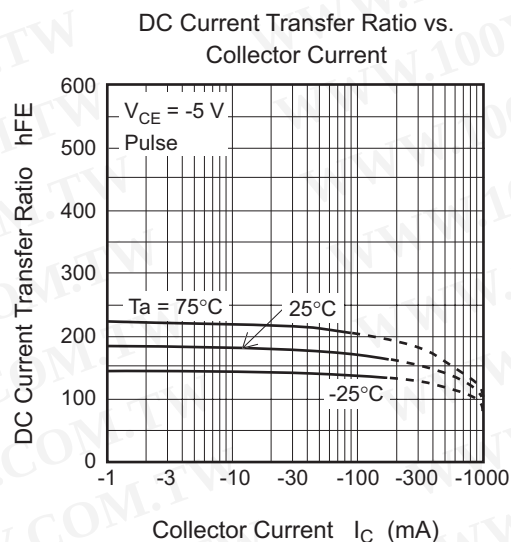
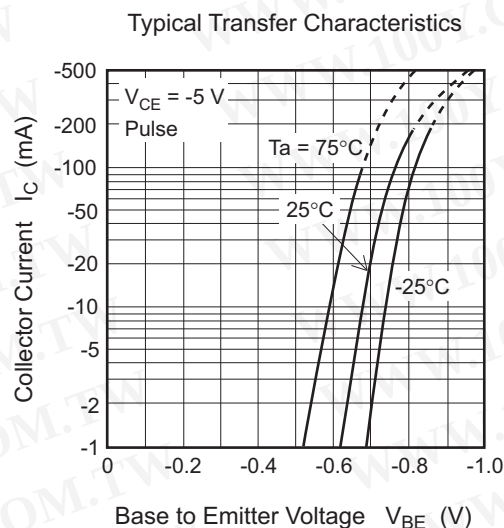
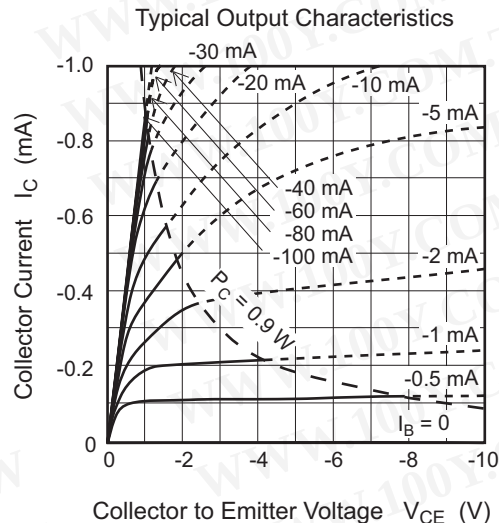
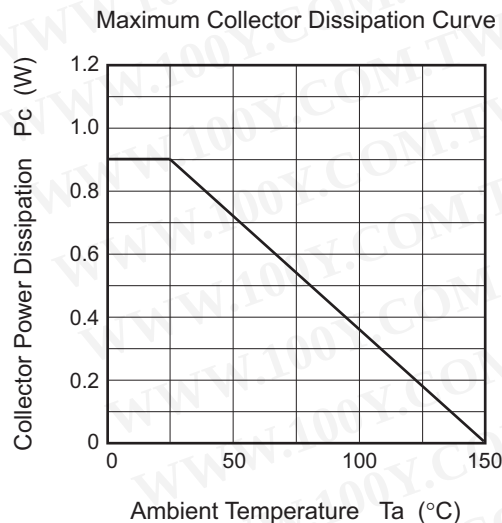
Electrical Characteristics

(Ta = 25°C)

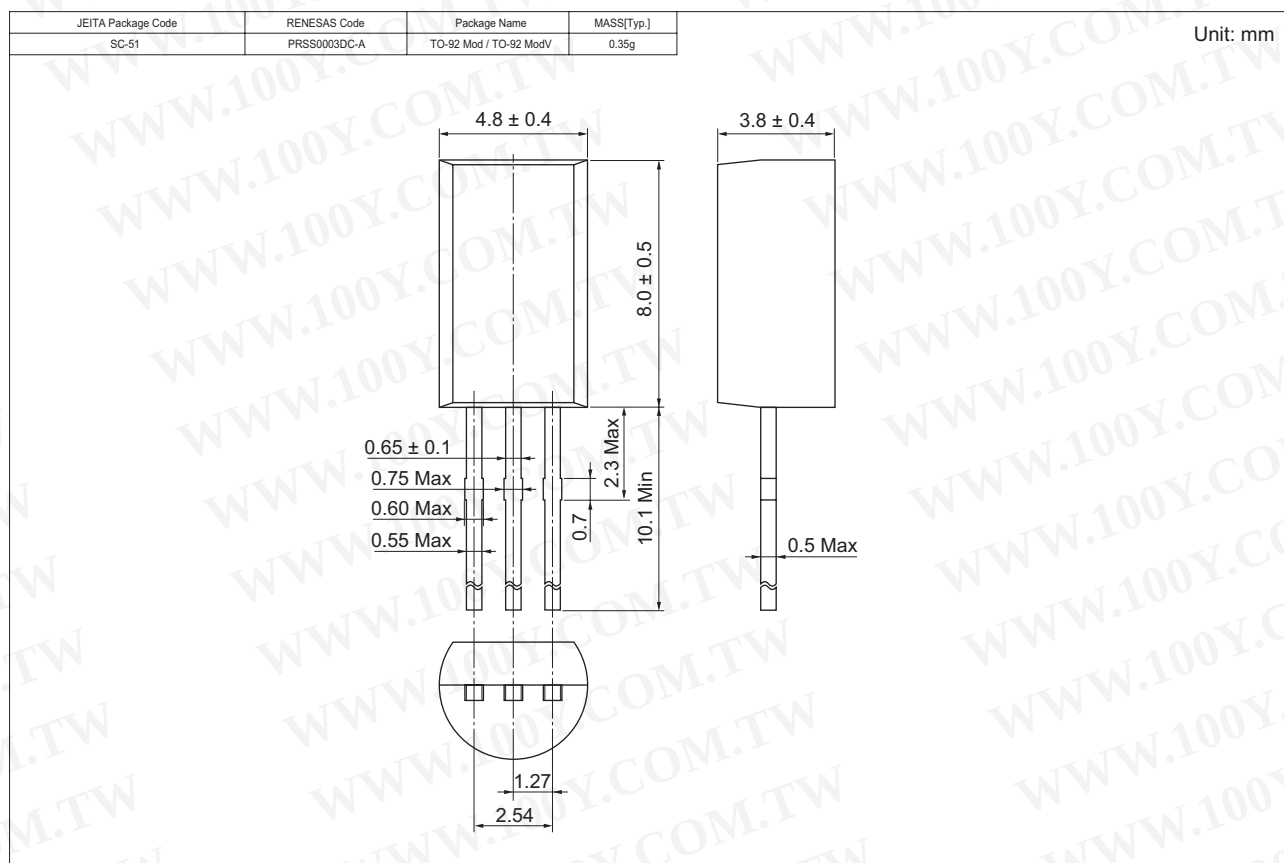
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-120	—	—	V	$I_C = -100 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-100	—	—	V	$I_C = -10 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-6	—	—	V	$I_E = -100 \mu A, I_C = 0$
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	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$

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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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