

HIT667

Silicon NPN Epitaxial

REJ03G1505-0300

Rev.3.00

Jun 23, 2009

Features

- Low frequency power amplifier
- Complementary pair with HIT647

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

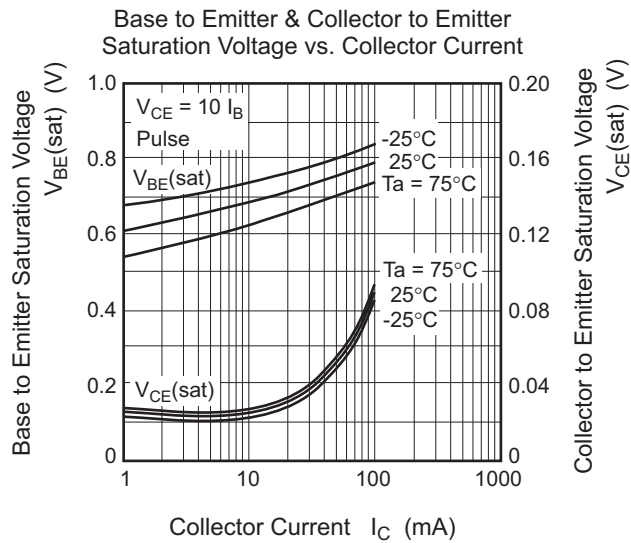
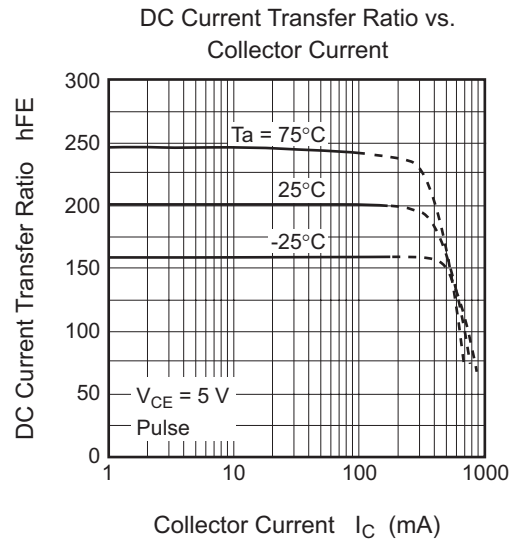
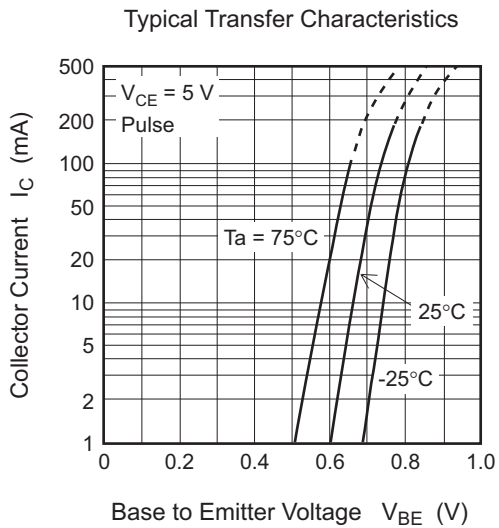
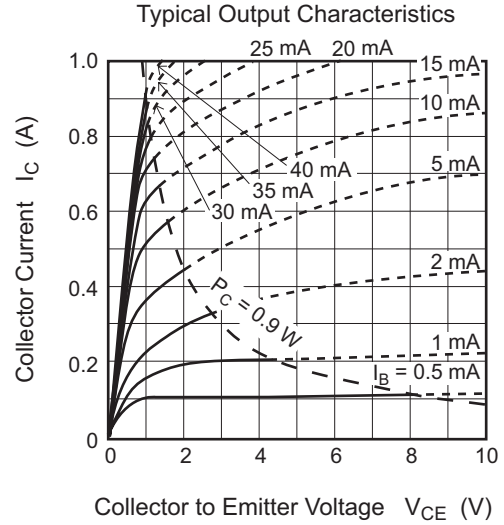
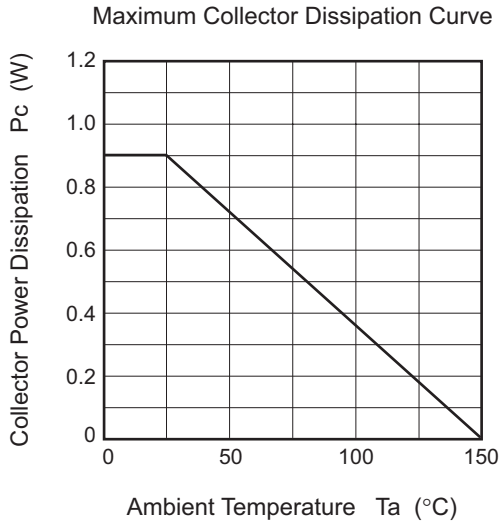
Note : 1. PW ≤ 10 ms, Duty cycle ≤ 20%

Electrical Characteristics

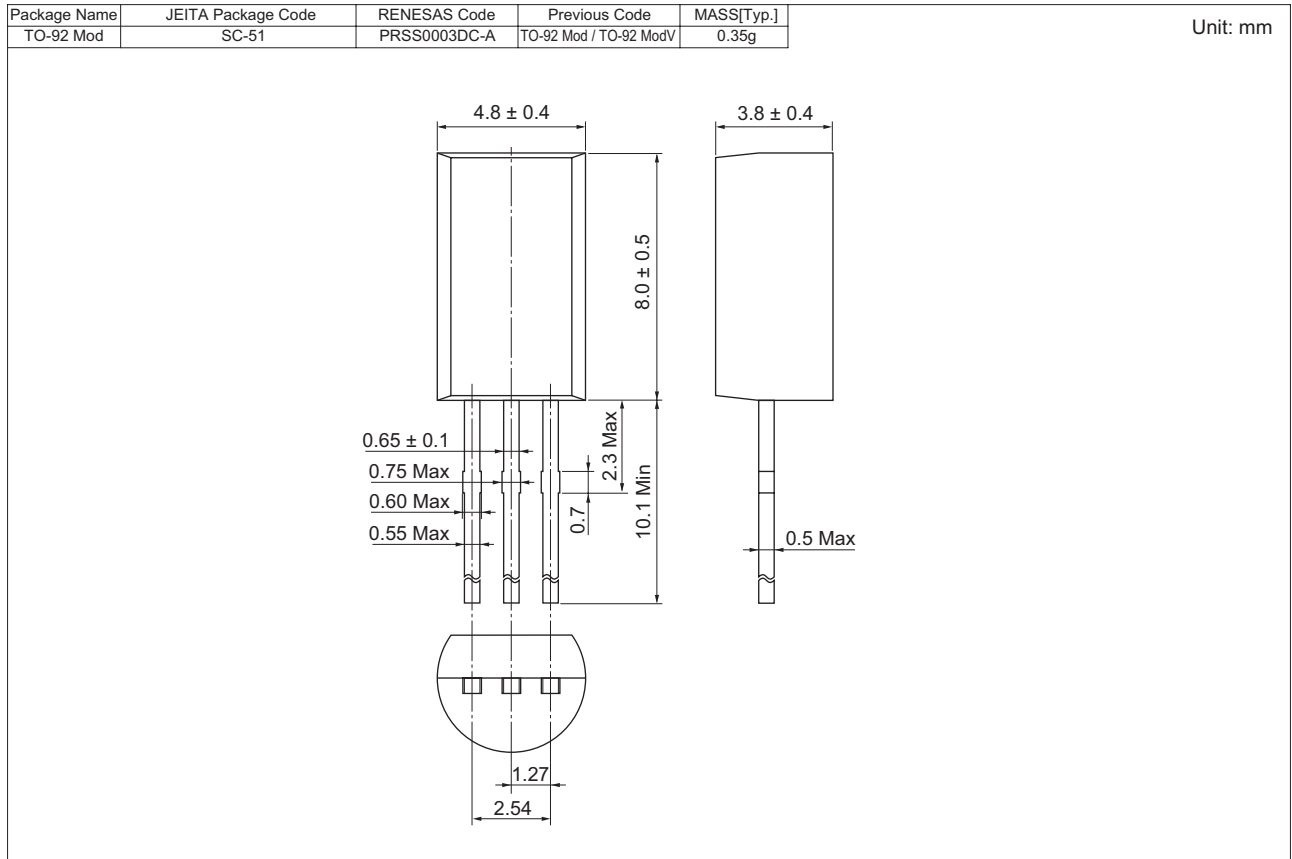
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	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	—	330	—	$V_{CE} = 2 \text{ V}, I_C = 150 \text{ mA}$
	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	$I_C = 500 \text{ mA}, I_B = 50 \text{ mA}$

Main Characteristics



Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container	Remarks
HIT667-EQ	2500 pcs.	Bulk, Vinyl Bag	PB free product
HIT667-TZ-EQ	2500 pcs.	Hold Box, Radial Taping	
HIT667-HQ	2500 pcs.	Bulk, Vinyl Bag	Halogen free & PB free product
HIT667-TZ-HQ	2500 pcs.	Hold Box, Radial Taping	

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

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