HIT468

Silicon NPN Epitaxial

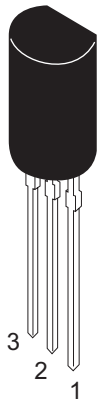
REJ03G1502-0200
Rev.2.00
Mar 05, 2007

Features

- Low frequency power amplifier
- Complementary pair with HIT562

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}	45	V
Collector to emitter voltage	V_{CEO}	25	V
Emitter to base voltage	V_{EBO}	6	V
Collector current	I_C	1.0	A
Collector peak current	$I_{C\ (peak)}$ *1	1.5	A
Collector power dissipation	P_C	0.8	W
Junction temperature	Tj	150	°C
Storage temperature	Tstg	–55 to +150	°C

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

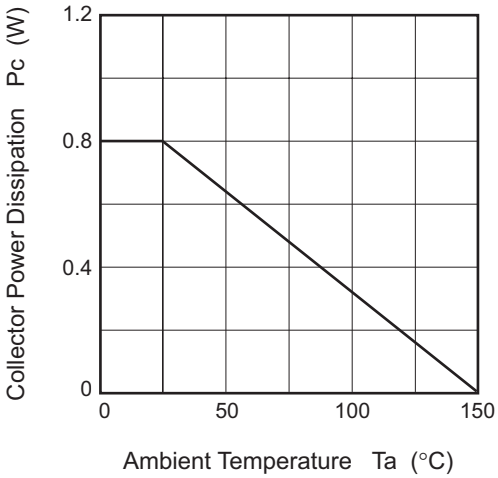
Electrical Characteristics

(Ta = 25°C)

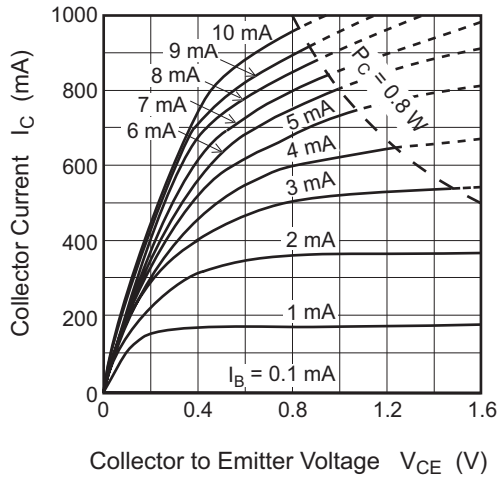
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	45	—	—	V	I_C = 10 µA, I_E = 0
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	25	—	—	V	I_C = 100 µA, R_{BE} = ∞
Emitter to base breakdown voltage	$V_{(BR)EBO}$	6	—	—	V	I_E = 10 µA, I_C = 0
Collector cutoff current	I_{CBO}	—	—	500	nA	V_{CB} = 45 V, I_E = 0
Emitter cutoff current	I_{EBO}	—	—	500	nA	V_{EB} = 6 V, I_C = 0
DC current transfer ratio	h_{FE1}	45	—	—	—	V_{CE} = 1 V, I_C = 5 mA
	h_{FE2}	85	—	330	—	V_{CE} = 1 V, I_C = 100 mA
	h_{FE3}	40	—	—	—	V_{CE} = 1 V, I_C = 800 mA
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	0.5	V	I_C = 800 mA, I_B = 80 mA
Base to emitter voltage	V_{BE}	—	—	1.0	V	V_{CE} = 1 V, I_C = 10 mA
Base to emitter saturation voltage	$V_{BE(sat)}$	—	—	1.2	V	I_C = 800 mA, I_B = 80 mA

Main Characteristics

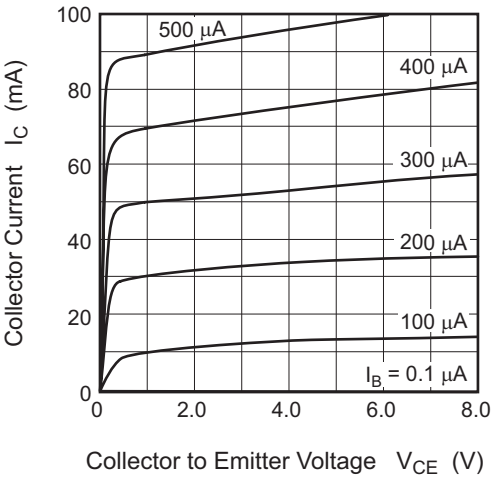
Maximum Collector Dissipation Curve



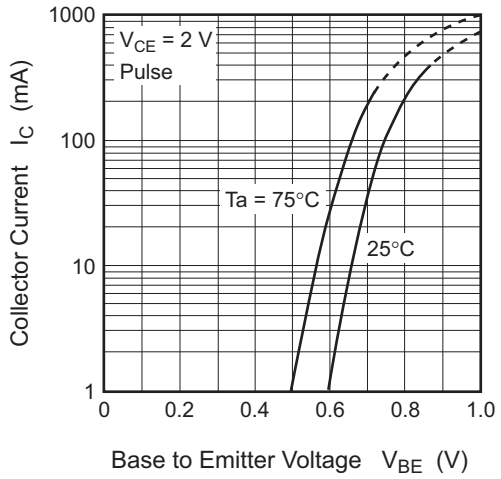
Typical Output Characteristics



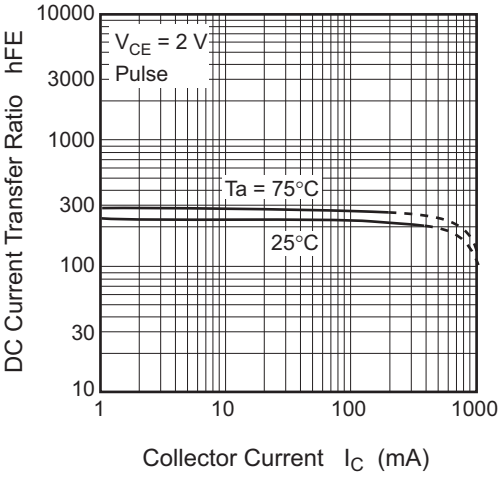
Typical Output Characteristics



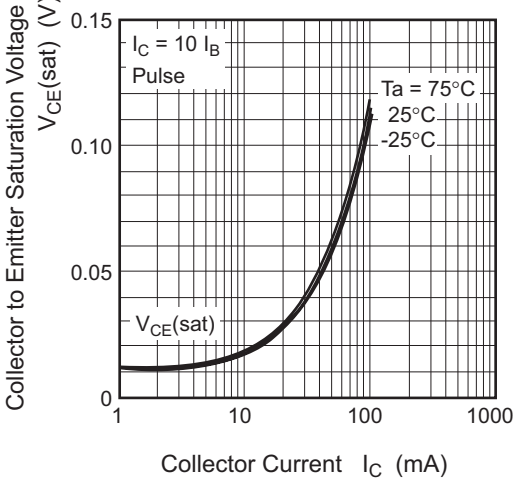
Typical Transfer Characteristics



DC Current Transfer Ratio vs. Collector Current



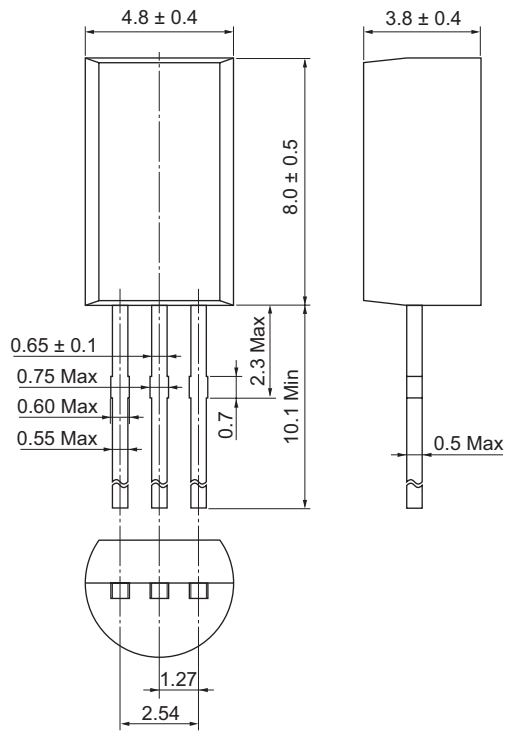
Base to Emitter & Collector to Emitter Saturation Voltage vs. Collector Current



Package Dimensions

JEITA Package Code	RENESAS Code	Package Name	MASS[Typ.]
SC-51	PRSS0003DC-A	TO-92 Mod / TO-92 ModV	0.35g

Unit: mm



Ordering Information

Part Name	Quantity	Shipping Container
HIT468-EQ	2500 pcs	Bulk, Vinyl Bag
HIT468TZ-EQ	2500 pcs	Hold Box, Radial Taping

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

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