

2SD468

Silicon NPN Epitaxial

REJ03G0766-0200
(Previous ADE-208-1135)
Rev.2.00
Aug.10.2005

Application

- Low frequency power amplifier
- Complementary pair with 2SB562

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}	25	V
Collector to emitter voltage	V_{CEO}	20	V
Emitter to base voltage	V_{EBO}	5	V
Collector current	I_C	1.0	A
Collector peak current	$i_{C(peak)}$	1.5	A
Collector power dissipation	P_C	0.9	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	25	—	—	V	$I_C = 10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	20	—	—	V	$I_C = 1 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	5	—	—	V	$I_E = 10 \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	1.0	μA	$V_{CB} = 20 \text{ V}, I_E = 0$
DC current transfer ratio	h_{FE}^{*1}	85	—	240		$V_{CE} = 2 \text{ V}, I_C = 0.5 \text{ A}^{*2}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	0.2	0.5	V	$I_C = 0.8 \text{ A}, I_B = 0.08 \text{ A}^{*2}$
Base to emitter voltage	V_{BE}	—	0.79	1.0	V	$V_{CE} = 2 \text{ V}, I_C = 0.5 \text{ A}^{*2}$
Gain bandwidth product	f_T	—	190	—	MHz	$V_{CE} = 2 \text{ V}, I_C = 0.5 \text{ A}^{*2}$
Collector output capacitance	C_{ob}	—	22	—	pF	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$

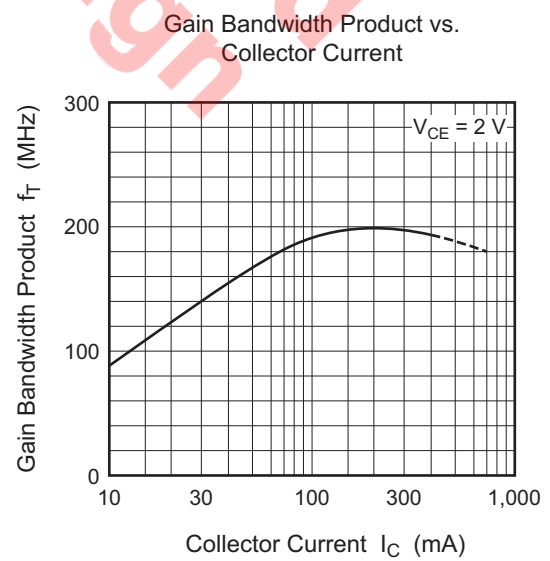
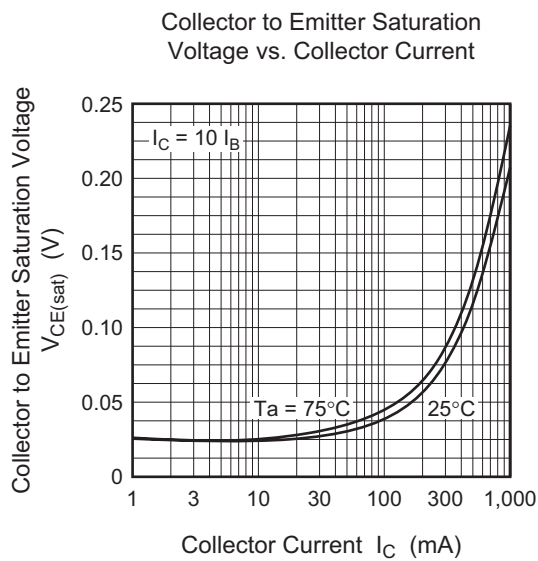
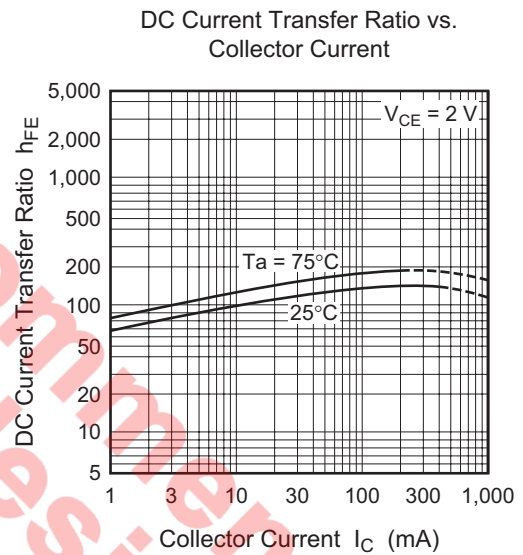
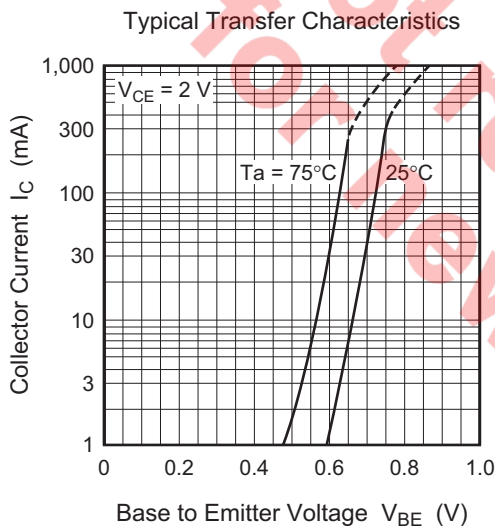
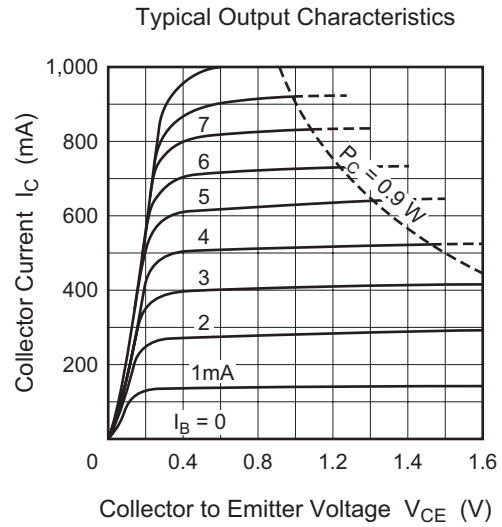
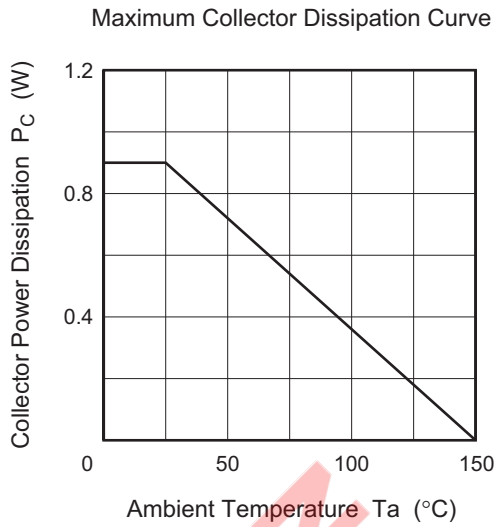
Notes: 1. The 2SD468 is grouped by h_{FE} as follows.

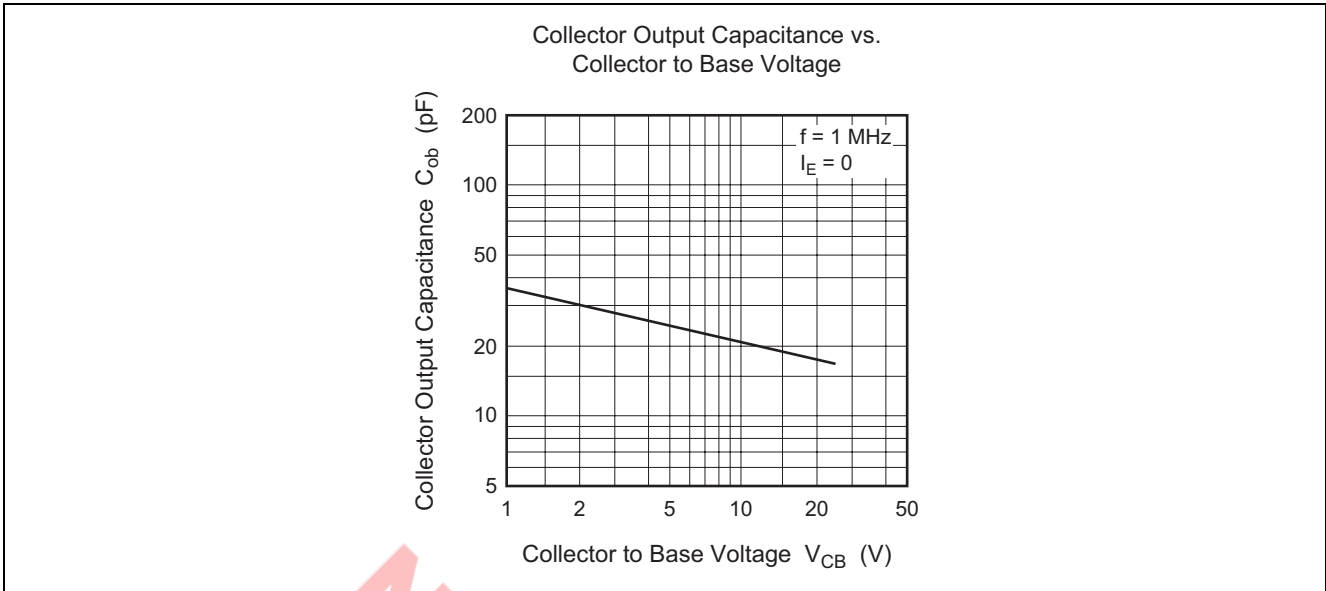
2. Pulse test

B	C
85 to 170	120 to 240

Not recommend
for new design

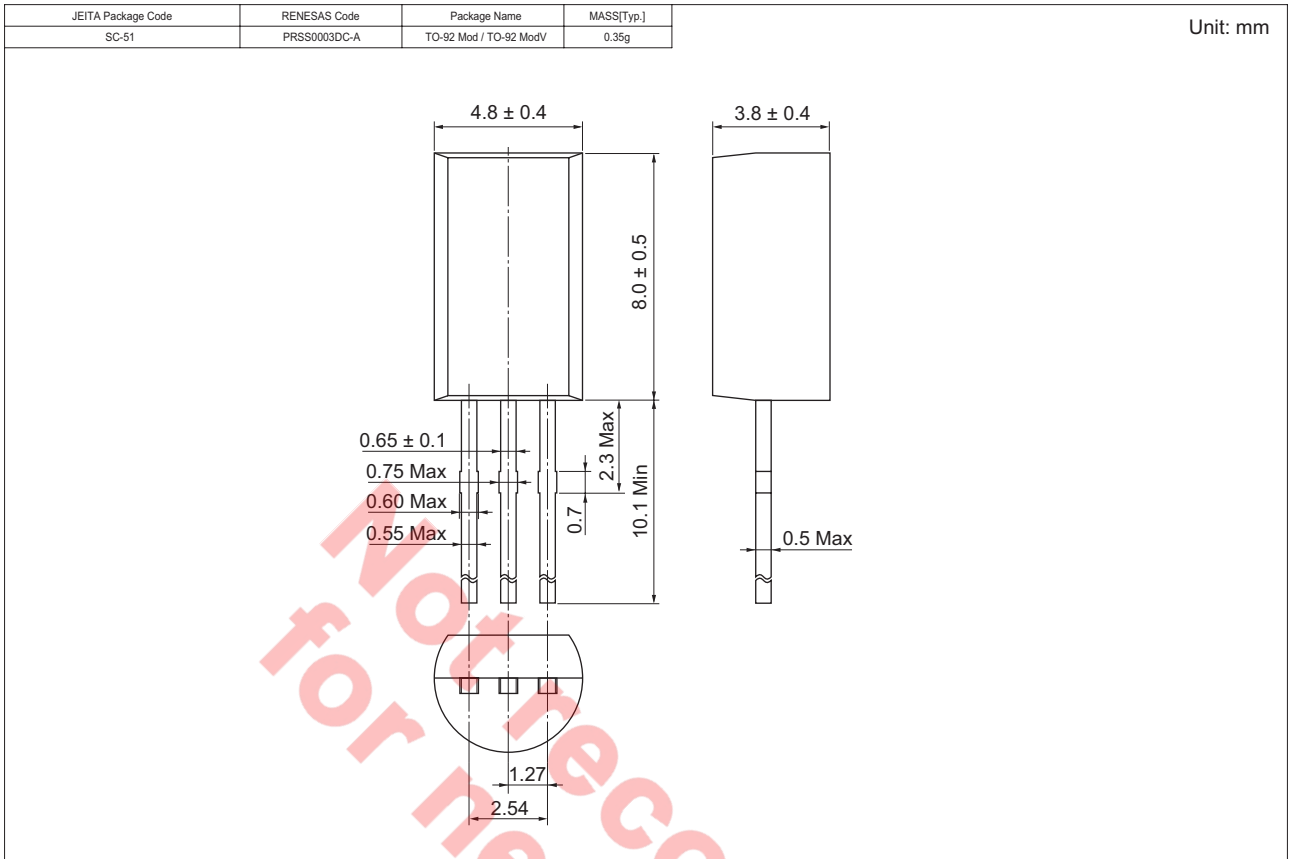
Main Characteristics





Not recommend for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SD468BTZ-E	2500	Hold Box, Radial Taping
2SD468CTZ-E		

Note: For some grades, production may be terminated. Please contact the Renesas sales office to check the state of production before ordering the product.

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