

## 2SD468

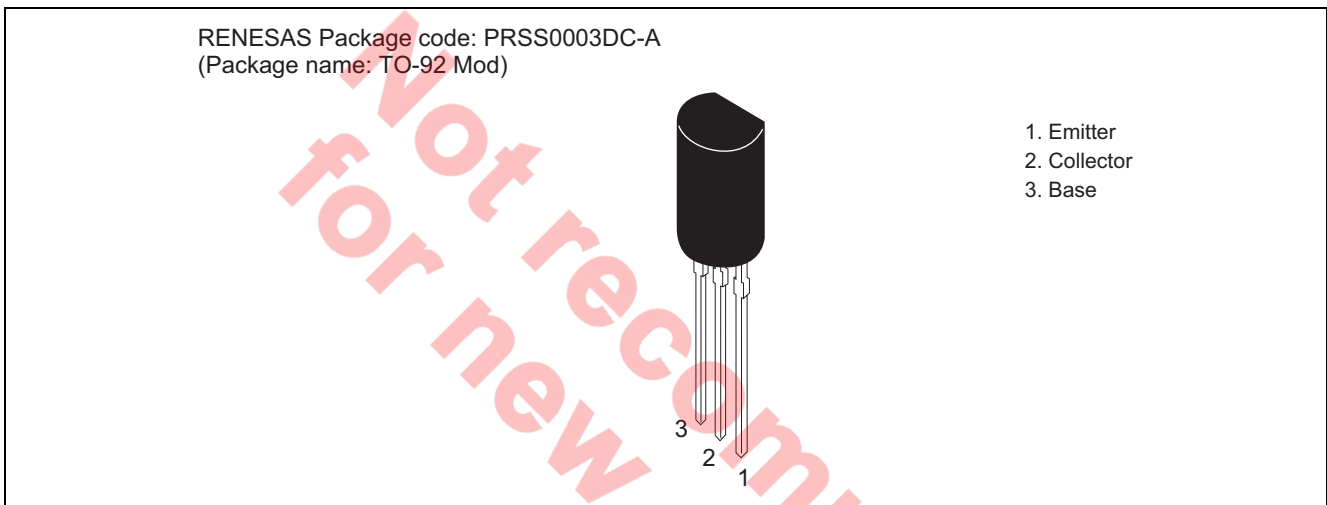
Silicon NPN Epitaxial

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

### Application

- Low frequency power amplifier
- Complementary pair with 2SB562

### Outline



### 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	$\mu A$	$V_{CB} = 20 \text{ V}, I_E = 0$
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	$V_{CB} = 10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$

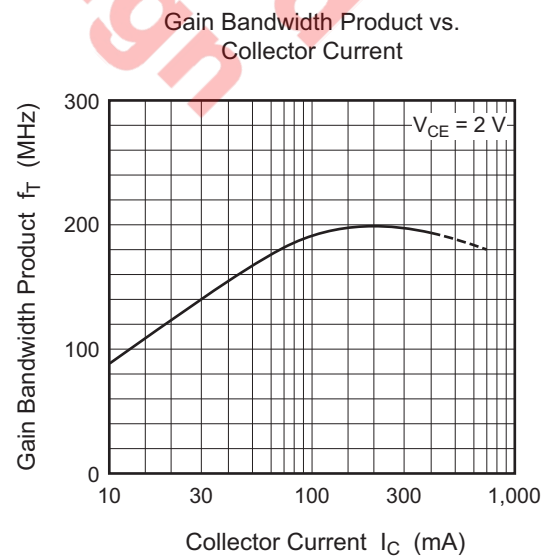
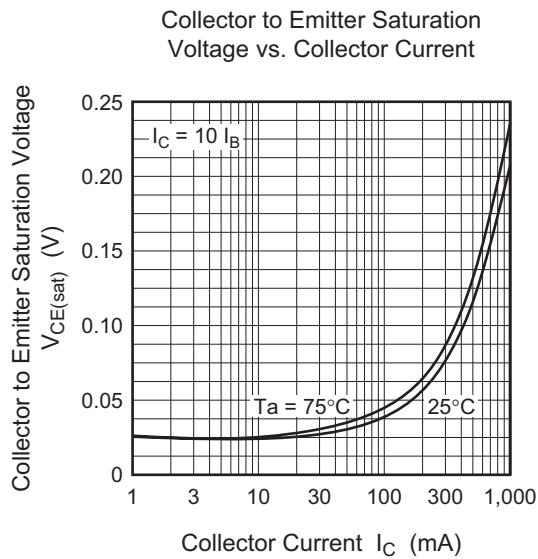
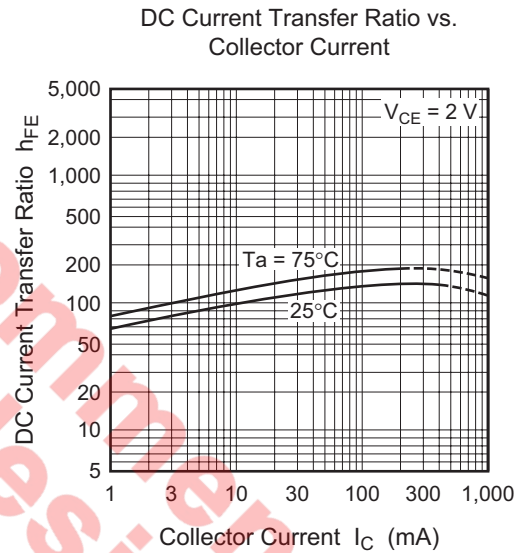
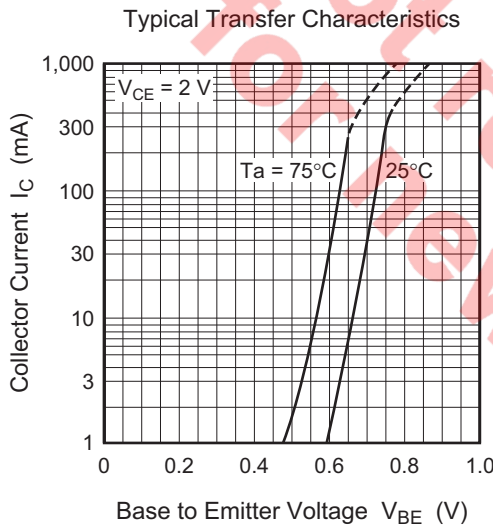
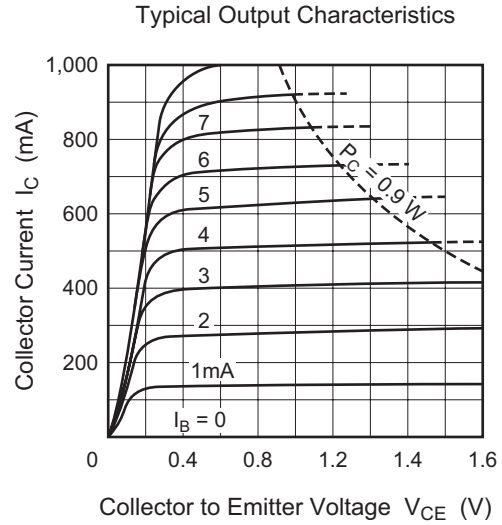
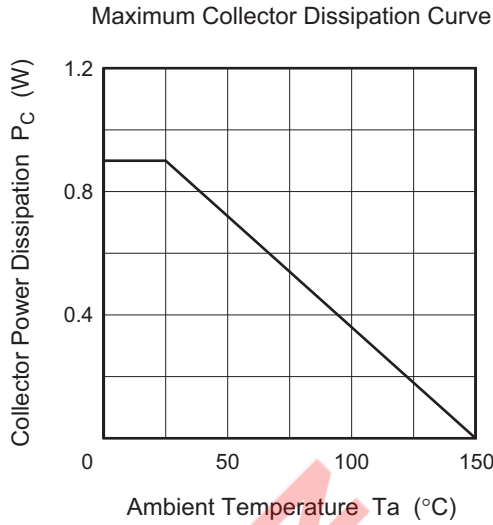
Notes: 1. The 2SD468 is grouped by  $h_{FE}$  as follows.

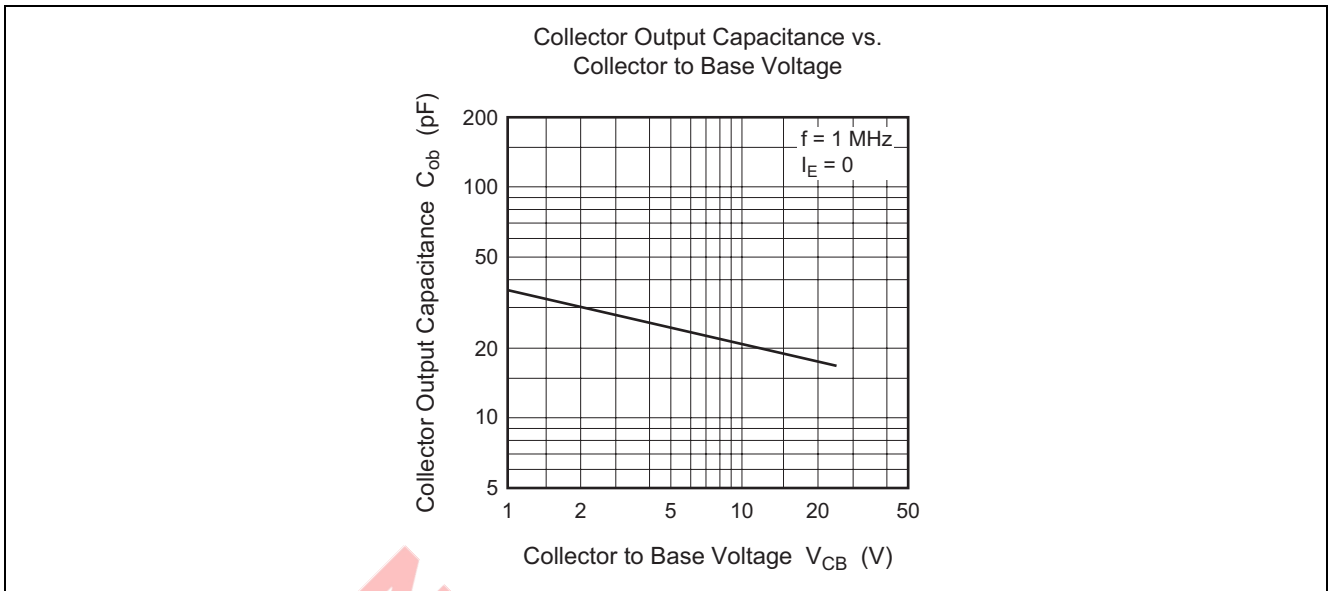
2. Pulse test

B	C
85 to 170	120 to 240

Not recommend  
for new design

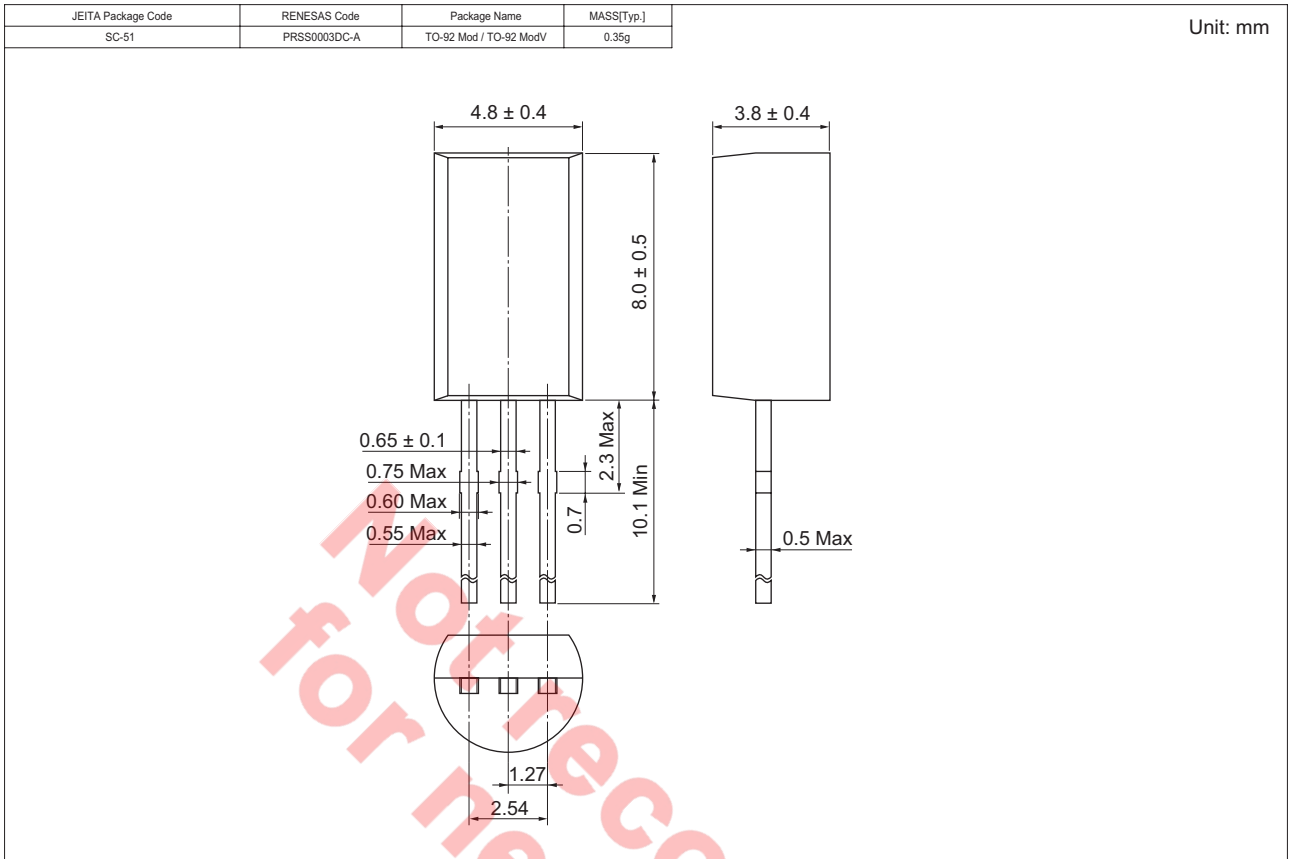
Main Characteristics





Not recommend  
for new design

### Package Dimensions



### Ordering Information

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

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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