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Old Company Name in Catalogs and Other Documents

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Renesas Electronics website: <http://www.renesas.com>

April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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Not recommended
for new design

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2SB562

Silicon PNP Epitaxial

REJ03G0646-0200
(Previous ADE-208-1024)
Rev.2.00
Aug.10.2005

Application

- Low frequency power amplifier
- Complementary pair with 2SD468

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)

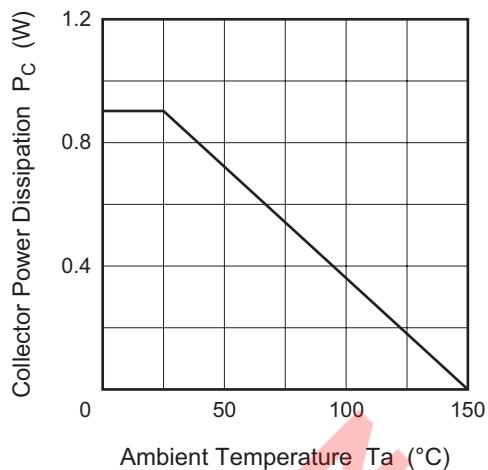
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-25	—	—	V	$I_C = -10\ \mu A$, $I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-20	—	—	V	$I_C = -1\ mA$, $R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10\ \mu A$, $I_C = 0$
Collector cutoff current	I_{CBO}	—	—	-1.0	μA	$V_{CB} = -20\ V$, $I_E = 0$
DC current transfer ratio	h_{FE}^{*1}	85	—	240		$V_{CE} = -2\ V$, $I_C = -0.5\ A$ (Pulse test)
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	-0.2	-0.5	V	$I_C = -0.8\ A$, $I_B = -0.08\ A$ (Pulse test)
Base to emitter voltage	V_{BE}	—	-0.8	-1.0	V	$V_{CE} = -2\ V$, $I_C = -0.5\ A$ (Pulse test)
Gain bandwidth product	f_T	—	350	—	MHz	$V_{CE} = -2\ V$, $I_C = -0.5\ A$ (Pulse test)
Collector output capacitance	C_{ob}	—	38	—	pF	$V_{CB} = -10\ V$, $I_E = 0$ $f = 1\ MHz$

Note: 1. The 2SB562 is grouped by h_{FE} as follows.

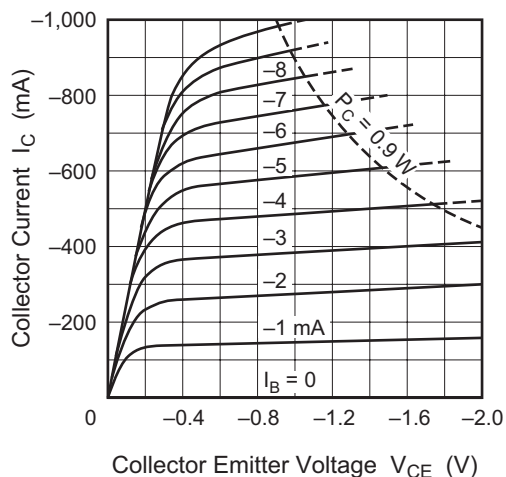
B	C
85 to 170	120 to 240

Main Characteristics

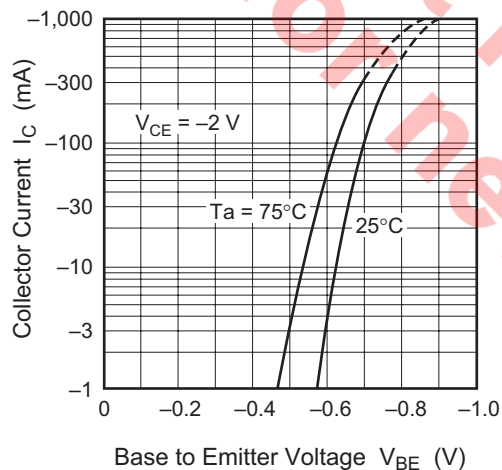
Maximum Collector Dissipation Curve



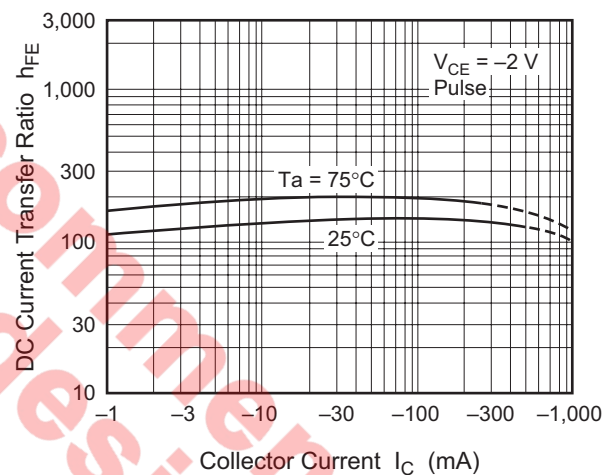
Typical Output Characteristics



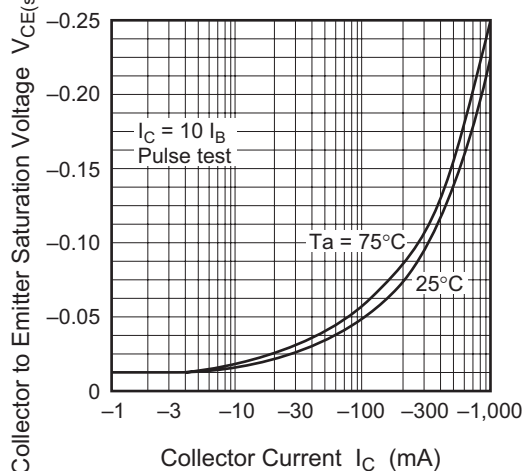
Typical Transfer Characteristics



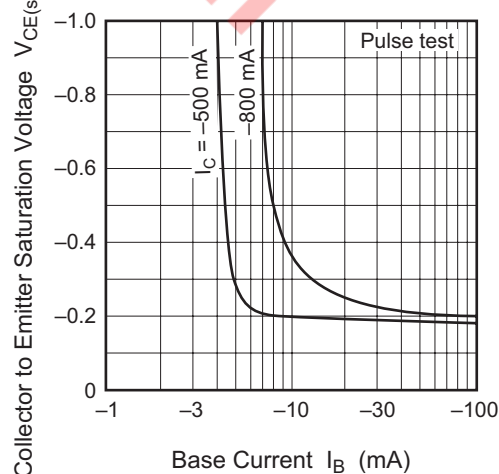
DC Current Transfer Ratio vs. Collector Current

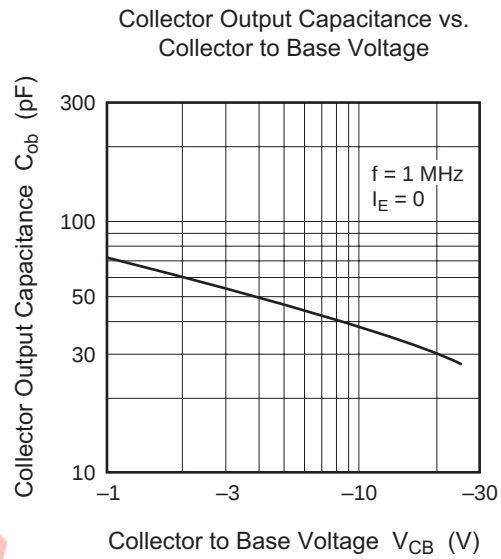


Collector to Emitter Saturation Voltage vs. Collector Current



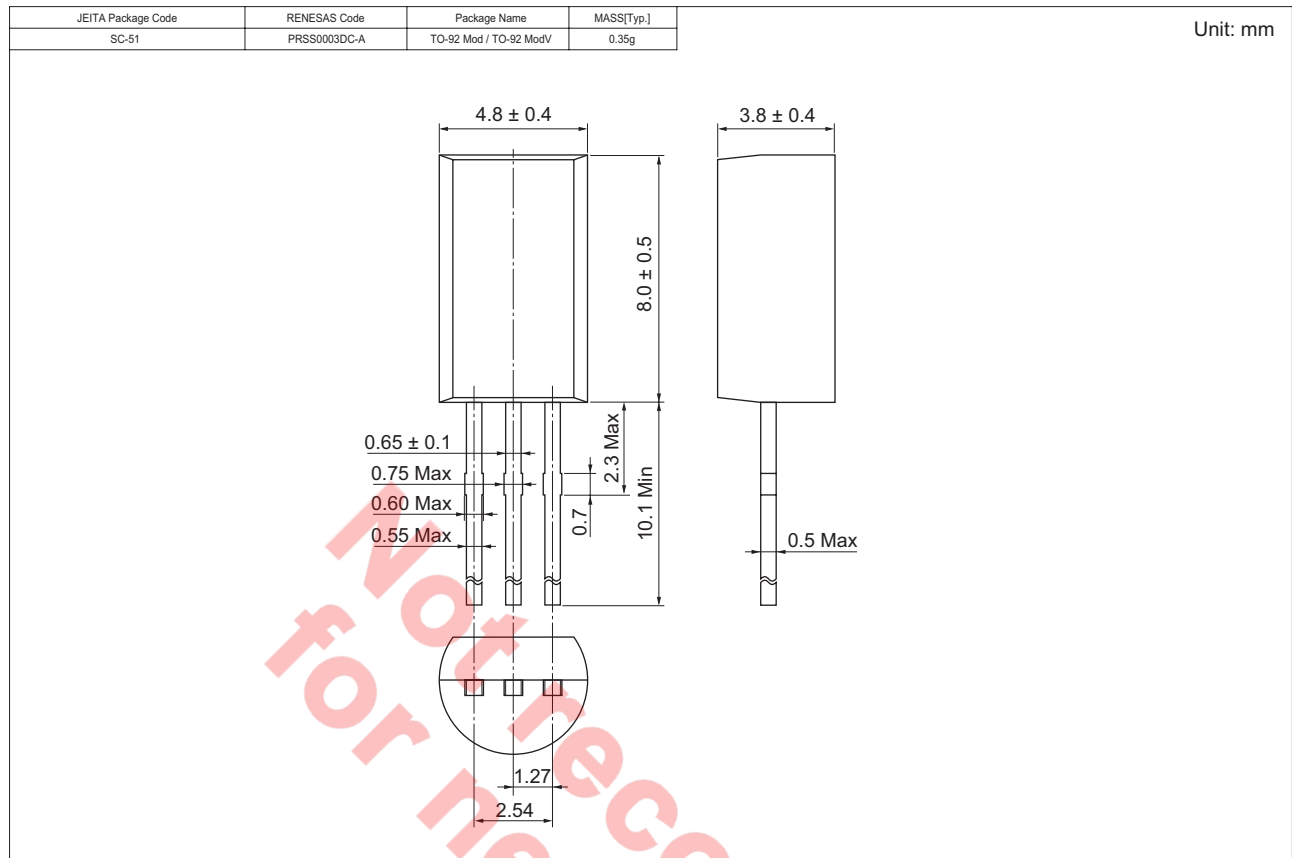
Collector to Emitter Saturation Voltage vs. Base Current





Not recommend
for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SB562BTZ-E	2500	Hold Box, Radial Taping
2SB562CTZ-E		

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