

To our customers,

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>)

Send any inquiries to <http://www.renesas.com/inquiry>.

EOL product

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2SB1688

Silicon PNP Epitaxial
High voltage amplifier

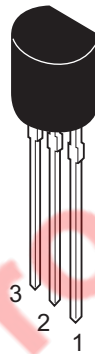
REJ03G0679-0300
(Previous ADE-208-975A)
Rev.3.00
Aug.10.2005

Features

- High breakdown voltage
 $V_{CEO} = -300V$ min

Outline

RENESAS Package code: PRSS0003DA-A
(Package name: TO-92 (1))



1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings

($T_a = 25^\circ C$)

Item	Symbol	Ratings	Unit
Collector to base voltage	V_{CBO}	-300	V
Collector to emitter voltage	V_{CEO}	-300	V
Emitter to base voltage	V_{EBO}	-5	V
Collector current	I_C	-50	mA
Collector power dissipation	P_C	750	mW
Junction temperature	T_j	150	$^\circ C$
Storage temperature	T_{stg}	-55 to +150	$^\circ C$

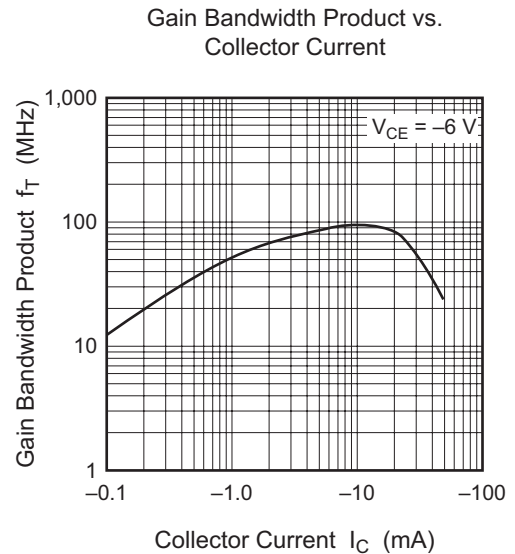
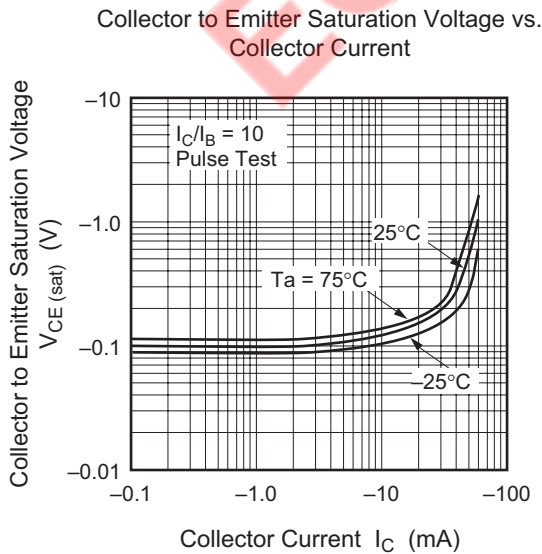
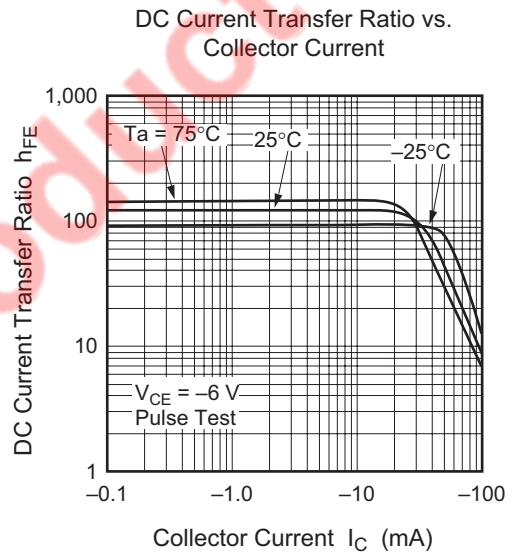
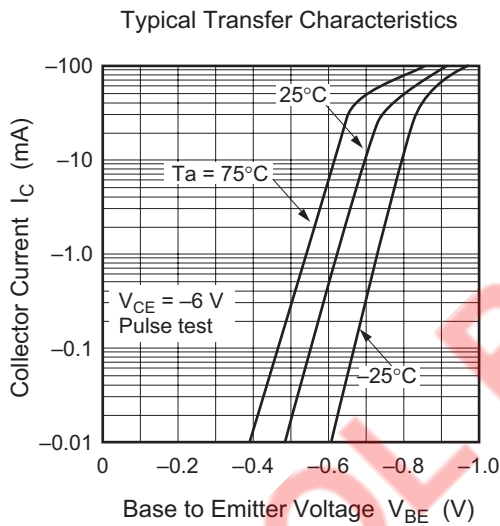
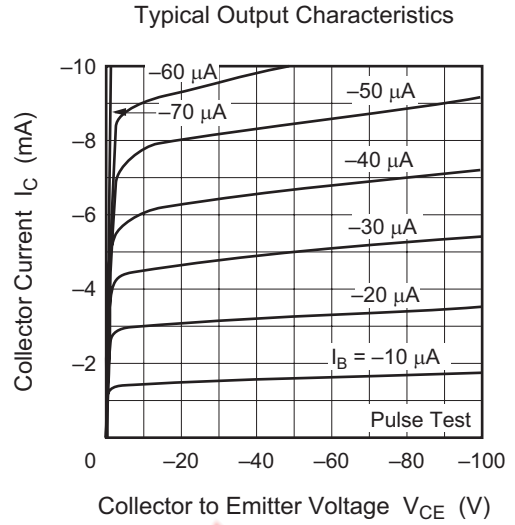
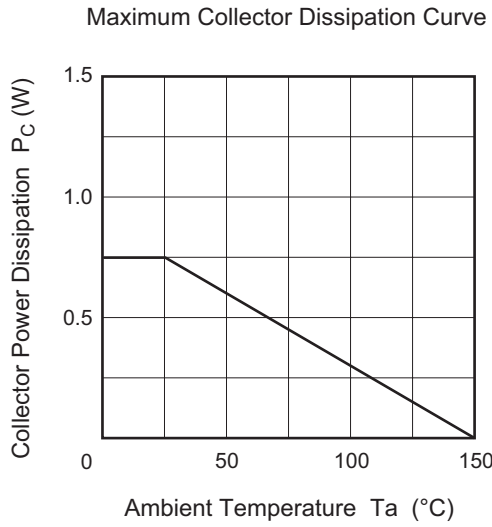
Electrical Characteristics

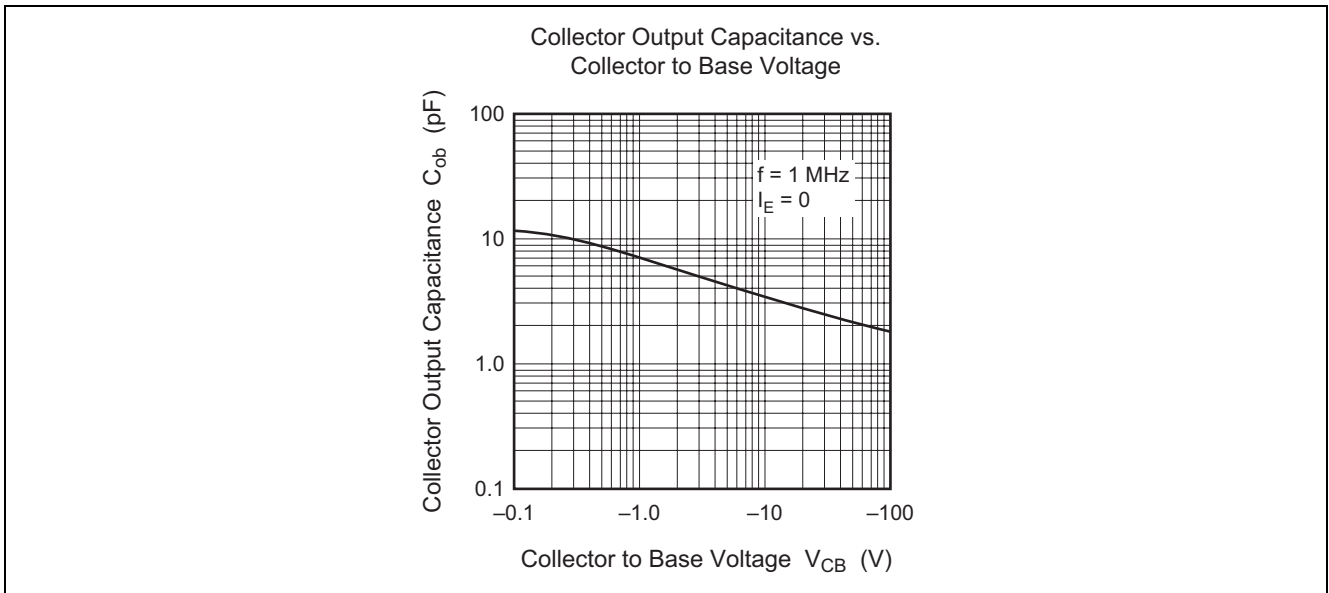
(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector cutoff current	I_{CBO}	—	—	-0.1	μA	$V_{CB} = -300V, I_E = 0$
	I_{CEO}	—	—	-0.1	μA	$V_{CE} = -300V, R_{BE} = \infty$
Emitter cutoff current	I_{EBO}	—	—	-10	μA	$V_{EB} = -5V, I_C = 0$
Base to emitter voltage	V_{BE}	—	—	-0.75	V	$V_{CE} = -6V, I_C = -1mA$
DC current transfer ratio	h_{FE}	80	—	160	—	$V_{CE} = -6V, I_C = -2mA$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.9	V	$I_C = -30mA, I_B = -3mA$

EOL Product

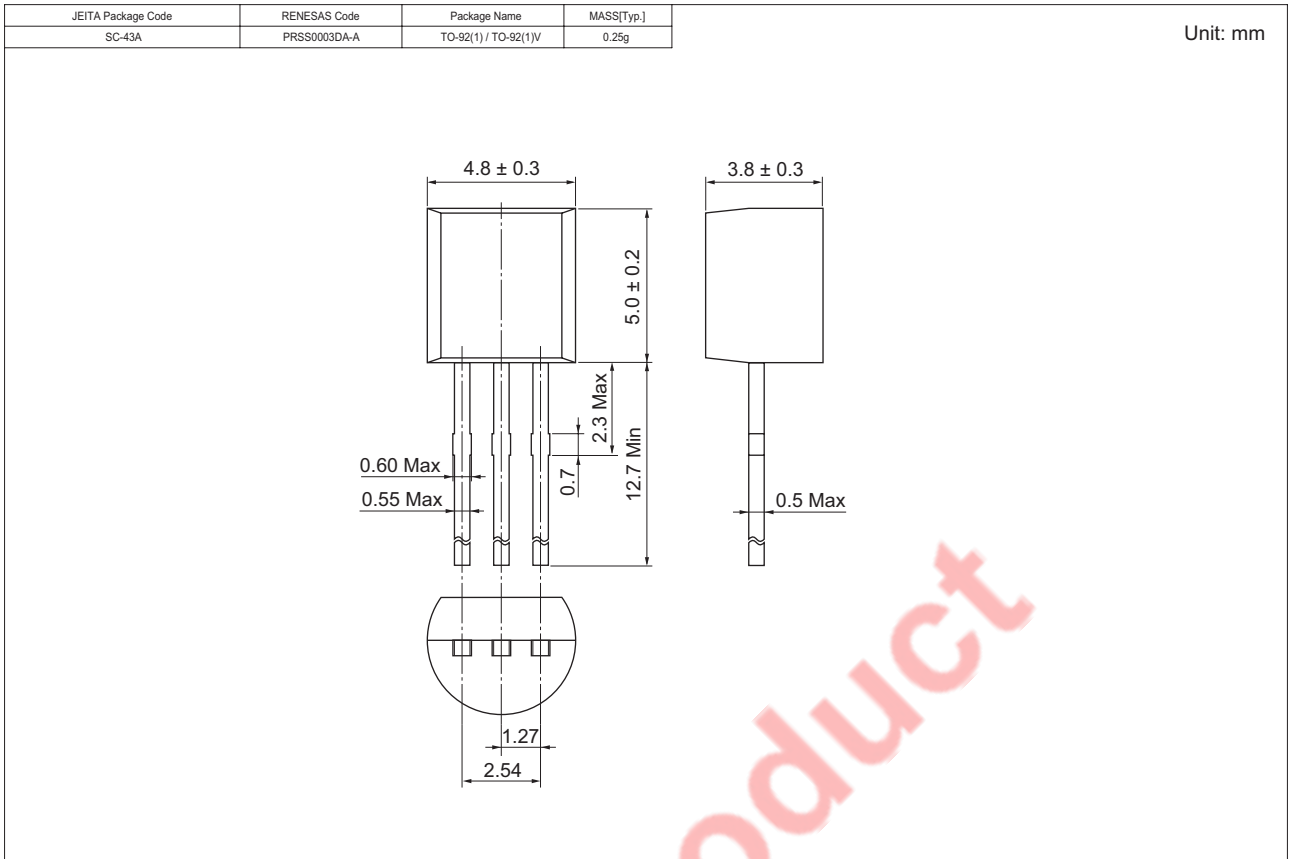
Main Characteristics





EOL Product

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SB1688TZ-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.

Renesas Technology Corp. Sales Strategic Planning Div. Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

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