

2SD2651

Silicon NPN Epitaxial
High Voltage Amplifier

REJ03G0809-0200
(Previous ADE-208-976)
Rev.2.00
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

(Ta = 25°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	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics

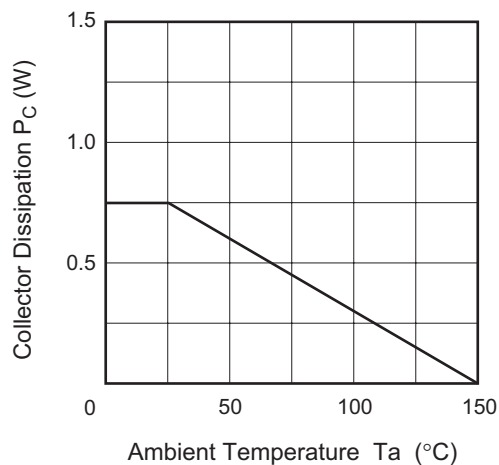
(Ta = 25°C)

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	$V_{CE(sat)}$	—	—	0.5	V	$I_C = 30mA, I_B = 3mA$

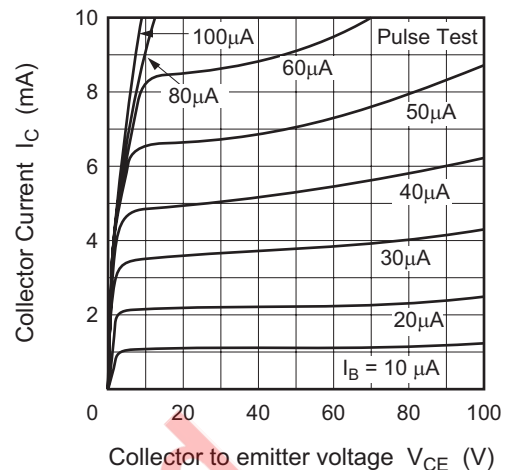
Not recommend
for new design

Main Characteristics

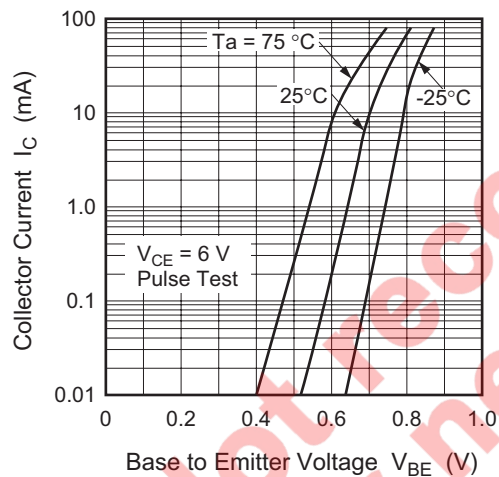
Maximum Collector Dissipation Curve



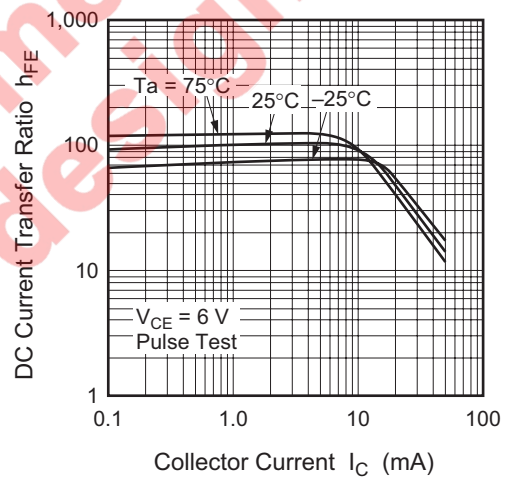
Typical Output Characteristics



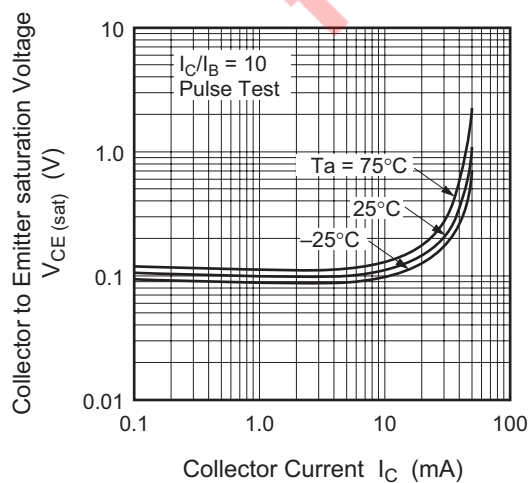
Typical Transfer Characteristics



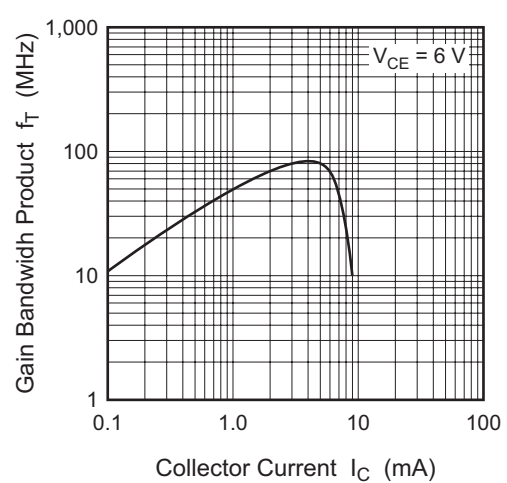
DC Current Transfer Ratio vs. Collector Current

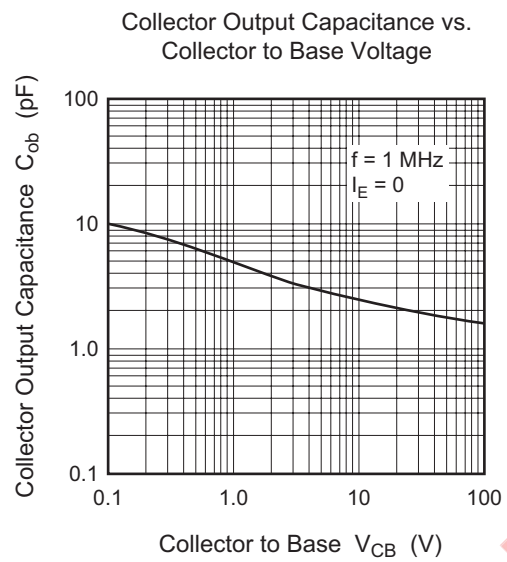


Collector to Emitter Saturation Voltage vs. Collector Current



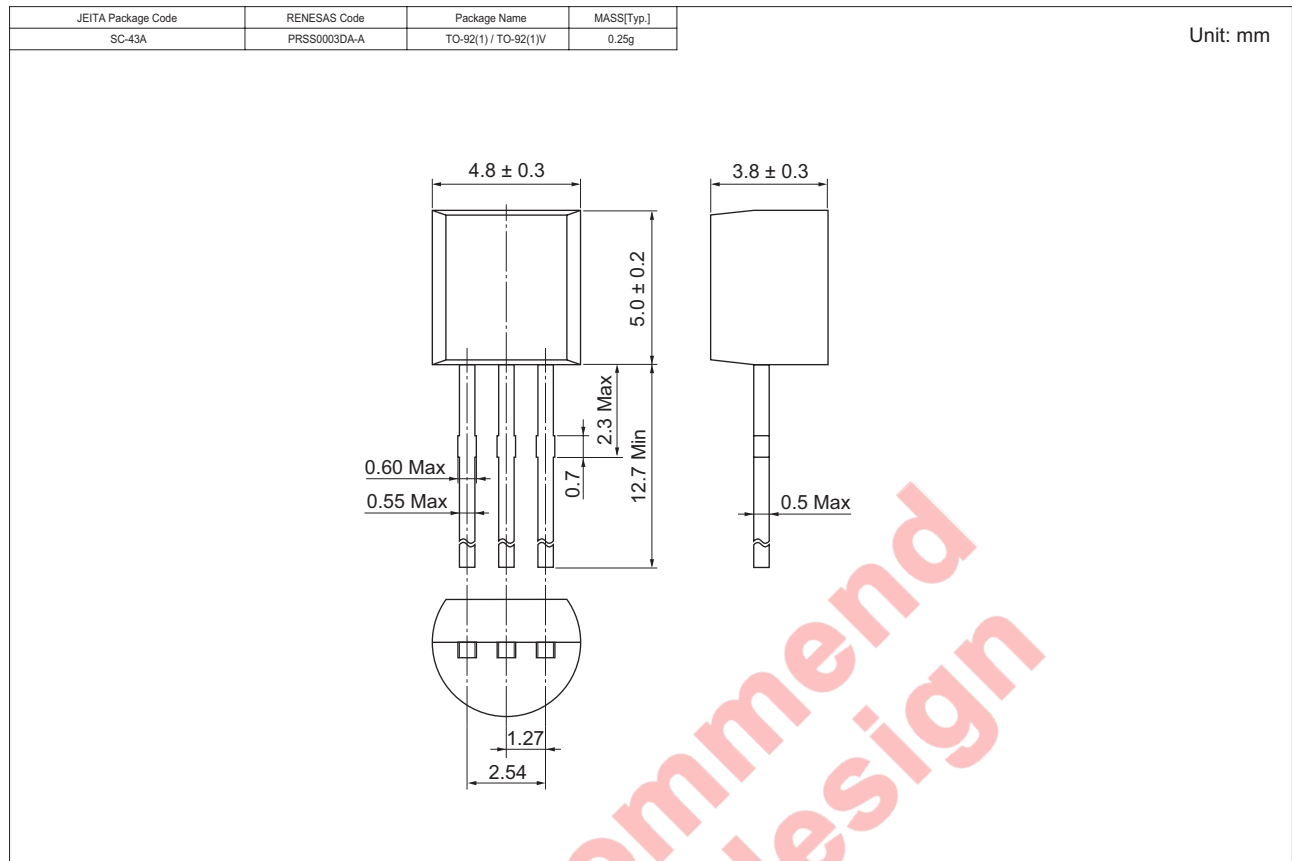
Gain Bandwidth Product vs. Collector Current





Not recommended
for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SD2651TZ-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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