

2SB740

Silicon PNP Epitaxial

REJ03G0651-0200
(Previous ADE-208-1032)
Rev.2.00
Aug.10.2005

Application

- Low frequency power amplifier
- Complementary pair with 2SD789

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}	-70	V
Collector to emitter voltage	V_{CEO}	-50	V
Emitter to base voltage	V_{EBO}	-6	V
Collector current	I_C	-1	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)

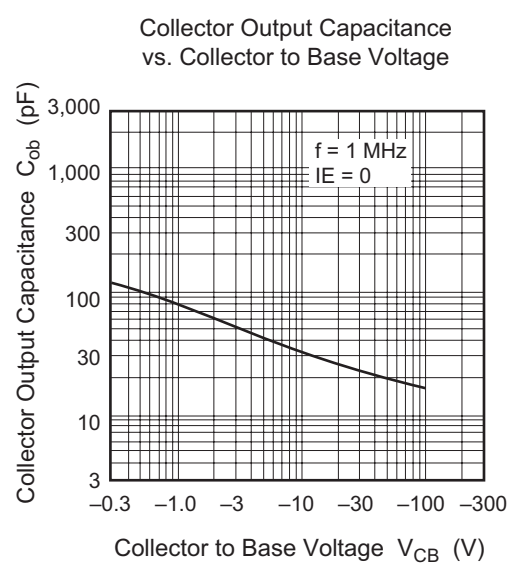
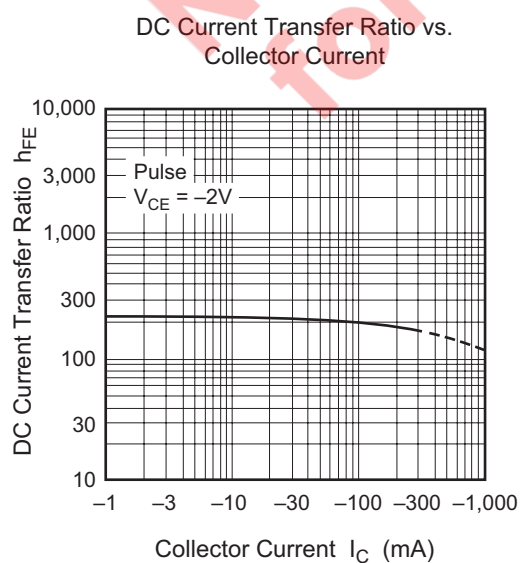
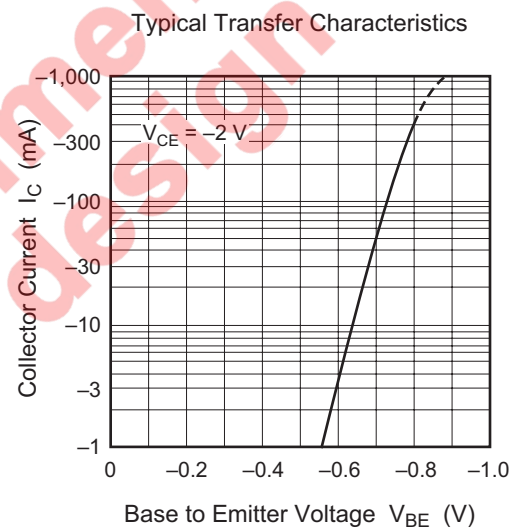
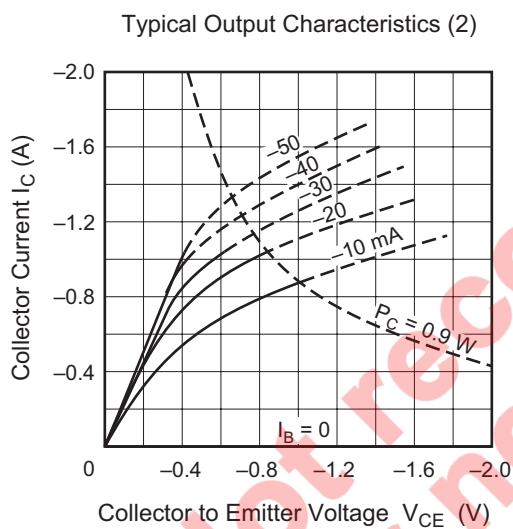
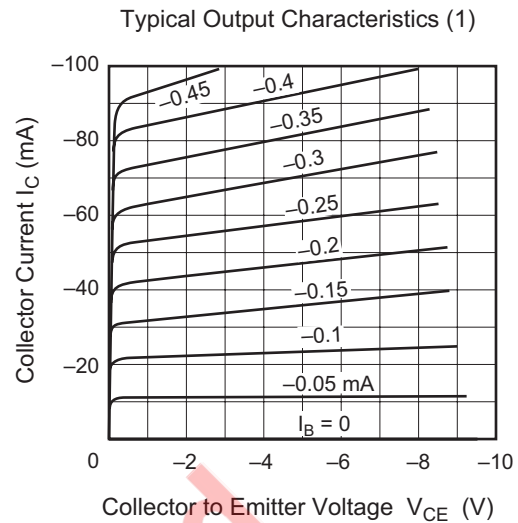
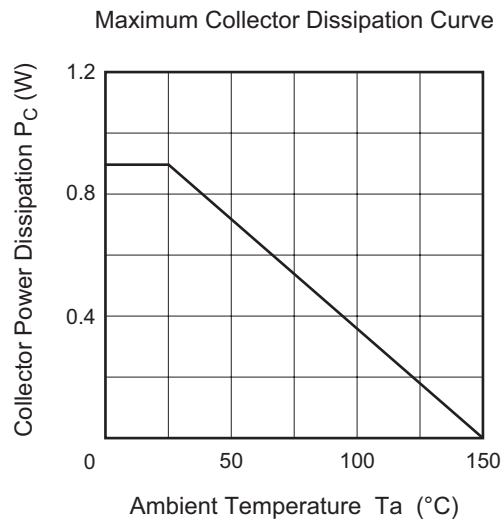
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-70	—	—	V	$I_C = -10\ \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-50	—	—	V	$I_C = -1\ mA, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-6	—	—	V	$I_E = -10\ \mu A, I_C = 0$
Collector cutoff current	I_{CBO}	—	—	-1	μA	$V_{CB} = -55\ V, I_E = 0$
Emitter cutoff current	I_{EBO}	—	—	-0.2	μA	$V_{EB} = -6\ V, I_C = 0$
DC current transfer ratio	h_{FE}^{*1}	100	—	320		$V_{CE} = -2\ V, I_C = -0.1\ A$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.6	V	$I_C = -1\ A, I_B = -0.1\ A$
Gain bandwidth product	f_T	—	150	—	MHz	$V_{CE} = -2\ V, I_C = -10\ mA$
Collector output capacitance	C_{ob}	—	35	—	pF	$V_{CB} = -10\ V, I_E = 0,$ $f = 1\ MHz$

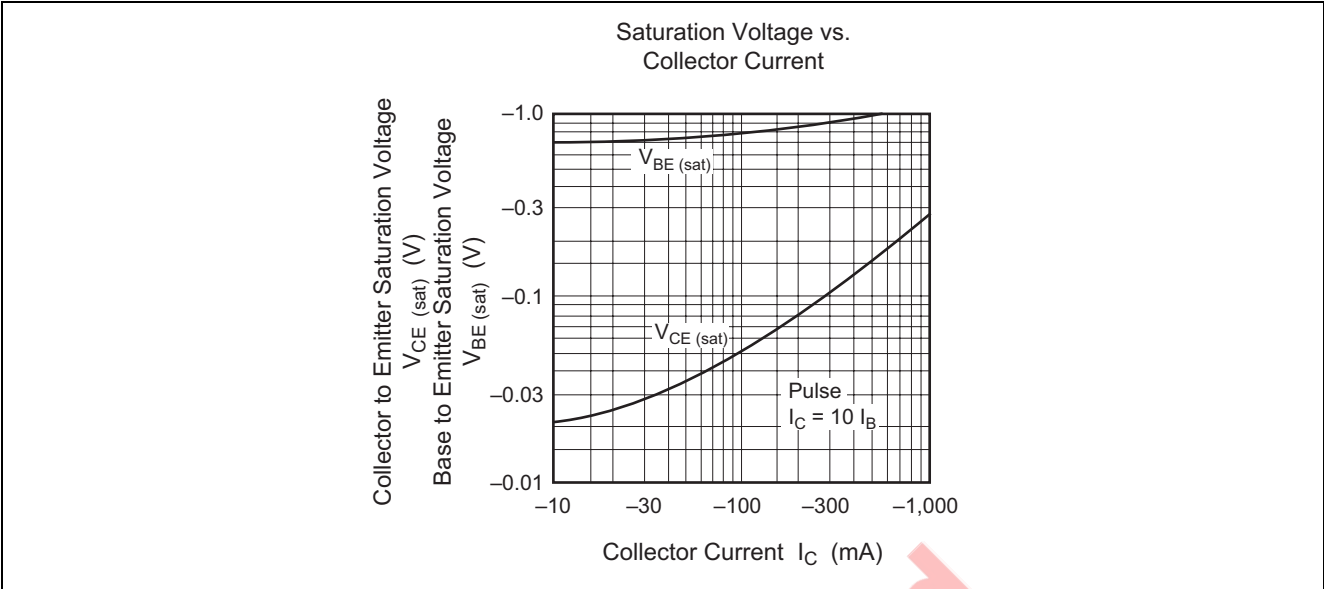
Note: 1. The 2SB740 is grouped by h_{FE} as follows.

B	C
100 to 200	160 to 320

Not recommend
for new design

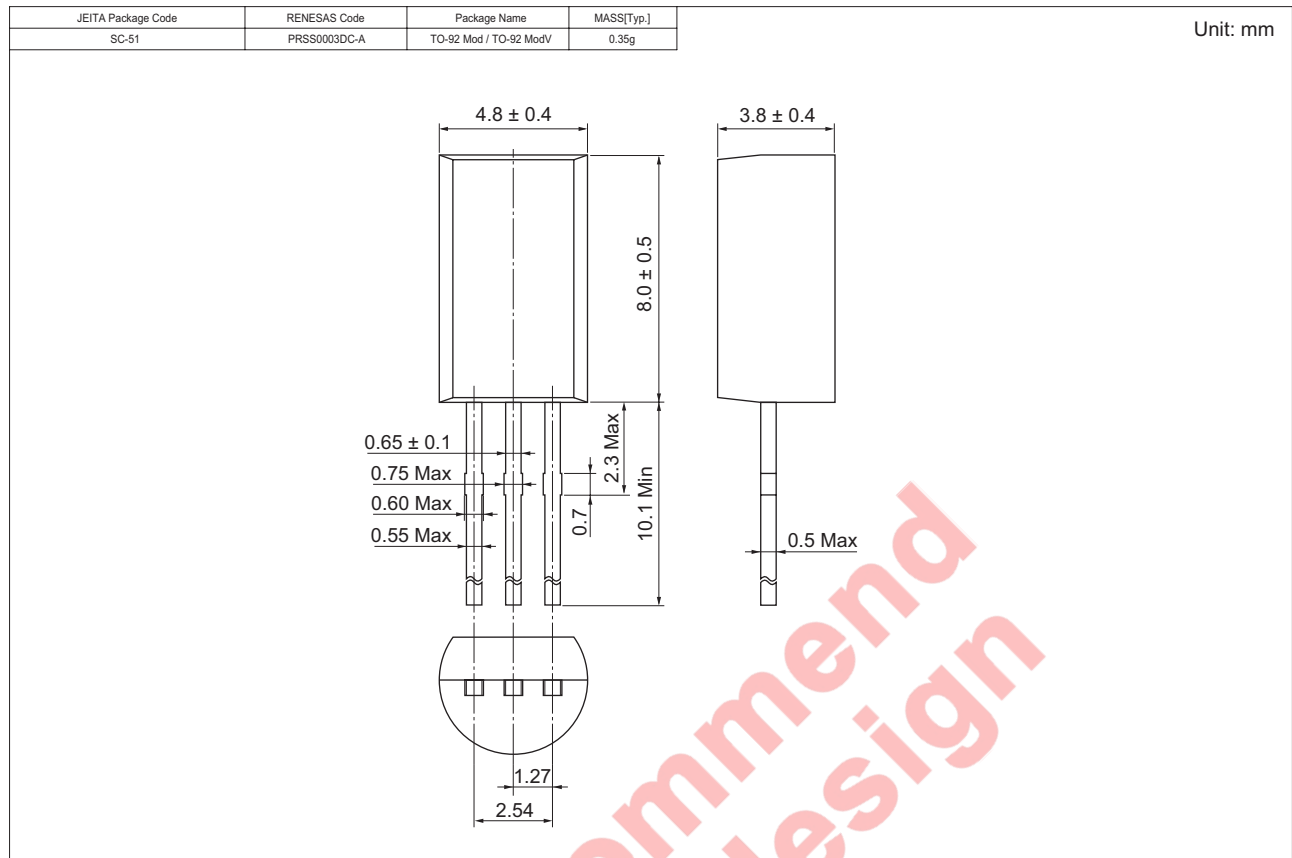
Main Characteristics





Not recommended
for new design

Package Dimensions



Ordering Information

Part Name	Quantity	Shipping Container
2SB740BTZ-E	2500	Hold Box, Radial Taping
2SB740CTZ-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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