

To all our customers

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Renesas Technology Corp.
Customer Support Dept.
April 1, 2003

Cautions

Keep safety first in your circuit designs!

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Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

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2SB561

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Silicon PNP Epitaxial

RENESAS

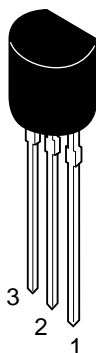
ADE-208-1023 (Z)
1st. Edition
Mar. 2001

Application

- Low frequency power amplifier
- Complementary pair with 2SD467

Outline

TO-92 (1)



1. Emitter
2. Collector
3. Base

Absolute Maximum Ratings (Ta = 25°C)

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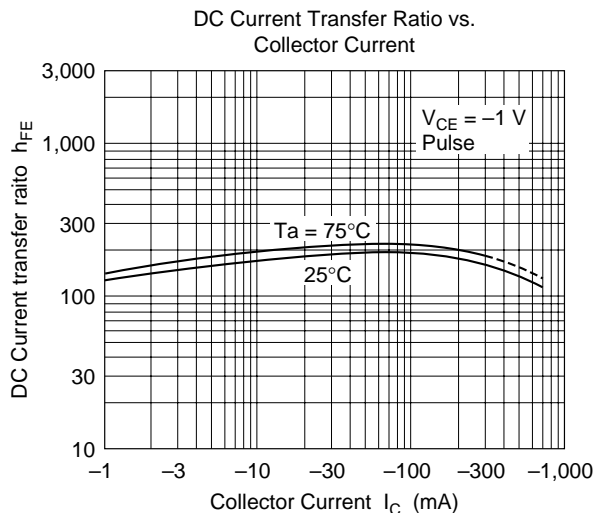
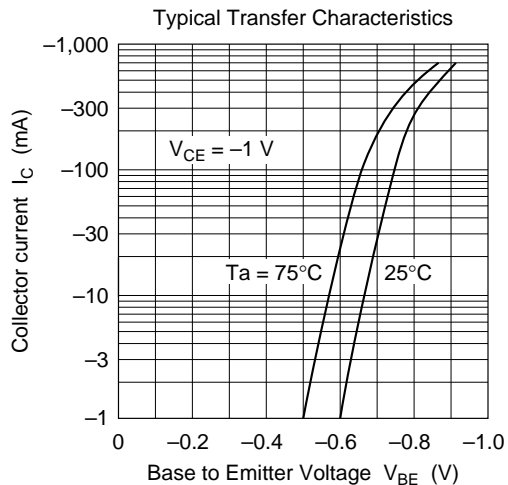
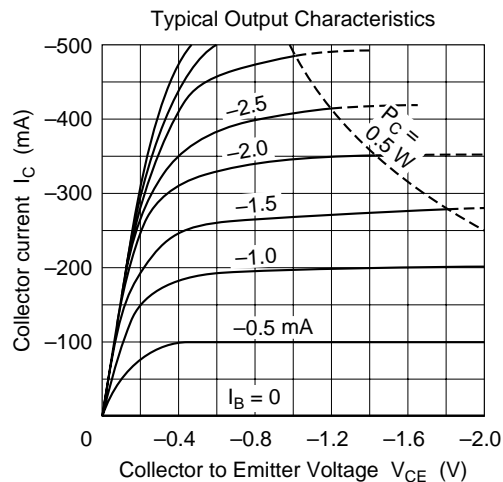
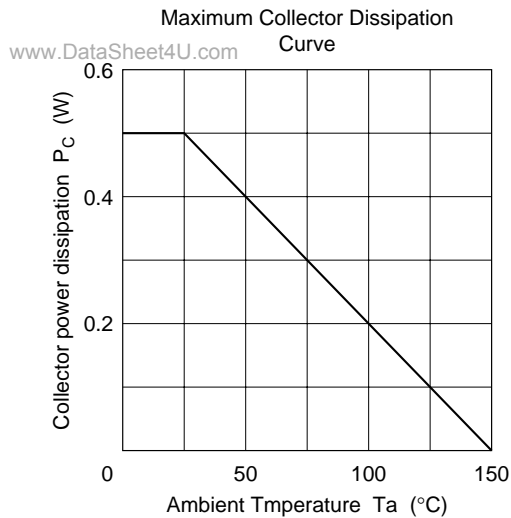
Item	Symbol	Ratings	Unit
Collector to base voltage	V _{CBO}	−25	V
Collector to emitter voltage	V _{CEO}	−20	V
Emitter to base voltage	V _{EBO}	−5	V
Collector current	I _C	−0.7	A
Collector peak current	i _{C(peak)}	−1.0	A
Collector power dissipation	P _C	0.5	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	−55 to +150	°C

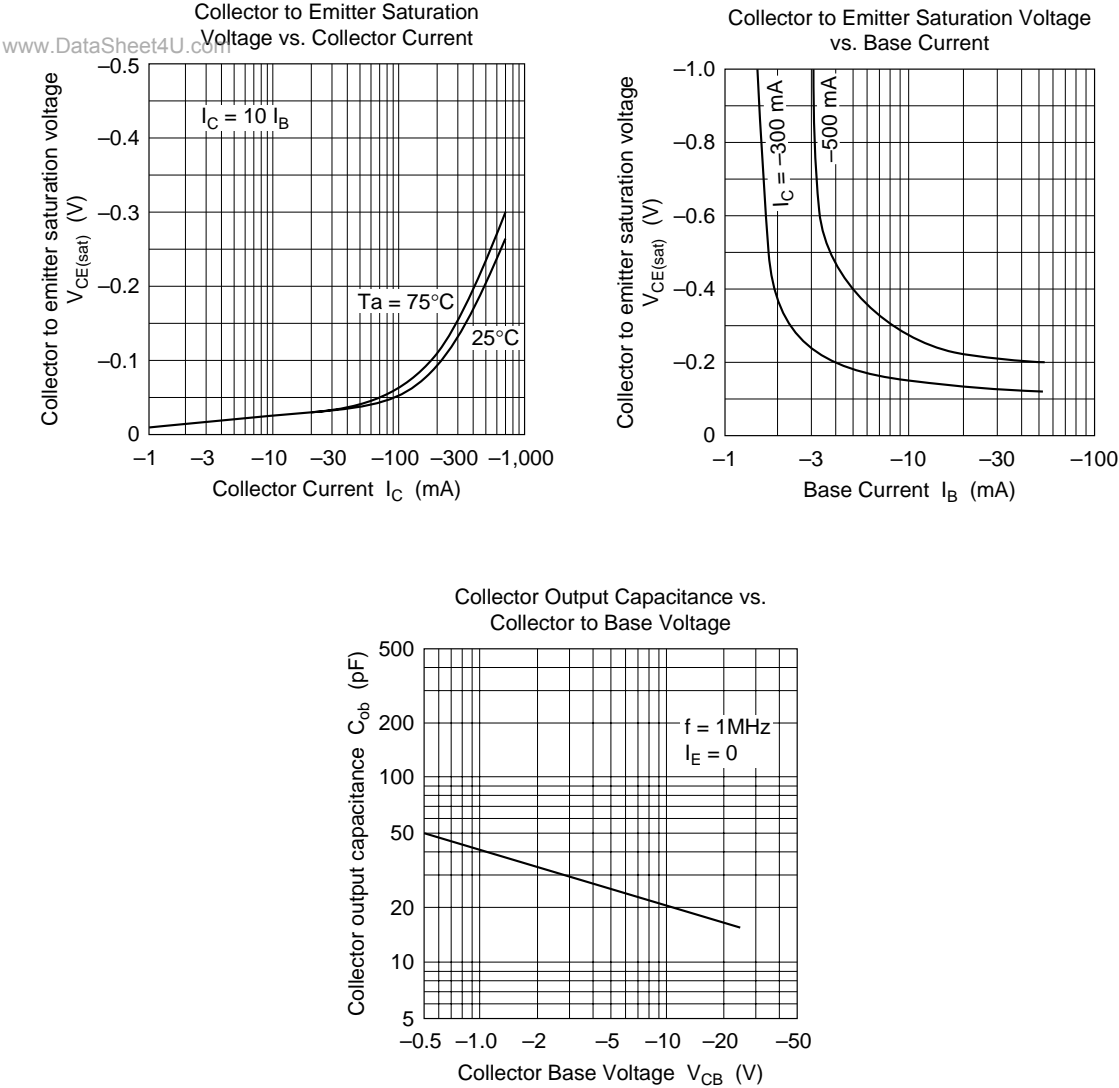
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	V _{(BR)CBO}	−25	—	—	V	I _C = −10 μA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	−20	—	—	V	I _C = −1 mA, R _{BE} = ∞
Emitter to base breakdown voltage	V _{(BR)EBO}	−5	—	—	V	I _E = −10 μA, 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} = −1 V, I _C = −0.15 A (Pulse test)
Collector to emitter saturation voltage	V _{CE(sat)}	—	−0.2	−0.5	V	I _C = −0.5 A, I _B = −0.05 A
Base to emitter voltage	V _{BE}	—	−0.75	−1.0	V	V _{CE} = −1 V, I _C = −0.15 A
Gain bandwidth product	f _T	—	350	—	MHz	V _{CE} = −1 V, I _C = −0.15 A
Collector output capacitance	Cob	—	20	—	pF	V _{CB} = −10 V, I _E = 0 f = 1 MHz

Note: 1. The 2SB561 is grouped by h_{FE} as follows.

B	C
85 to 170	120 to 240



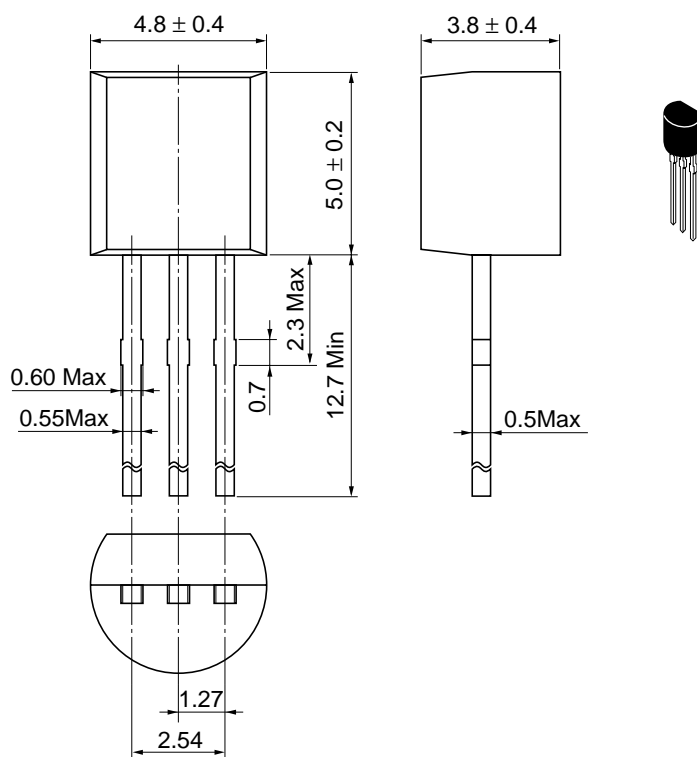


Package Dimensions

www.DataSheet4U.com

As of January, 2001

Unit: mm



Hitachi Code	TO-92 (1)
JEDEC	Conforms
EIAJ	Conforms
Mass (reference value)	0.25 g

Cautions

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