

To our customers,

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## Old Company Name in Catalogs and Other Documents

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

April 1<sup>st</sup>, 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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To all our customers

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Renesas Technology Home Page: <http://www.renesas.com>

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

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# 2SA1485

Silicon PNP Epitaxial

**RENESAS**

ADE-208-1020 (Z)

1st. Edition

Mar. 2001

## Application

Low frequency amplifier

## Outline

TO-92 (1)



1. Emitter
2. Collector
3. Base

## Absolute Maximum Ratings (Ta = 25°C)

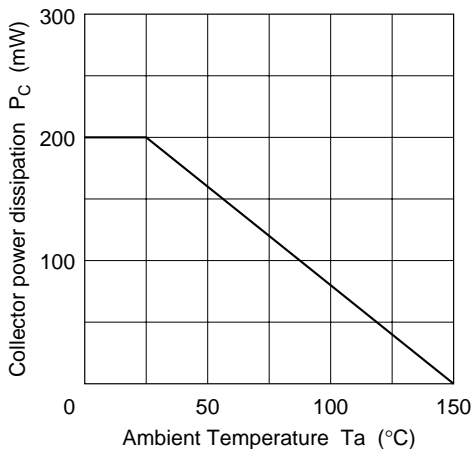
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	-200	V
Collector to emitter voltage	$V_{CEO}$	-200	V
Emitter to base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-100	mA
Collector power dissipation	$P_C$	200	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

## Electrical Characteristics (Ta = 25°C)

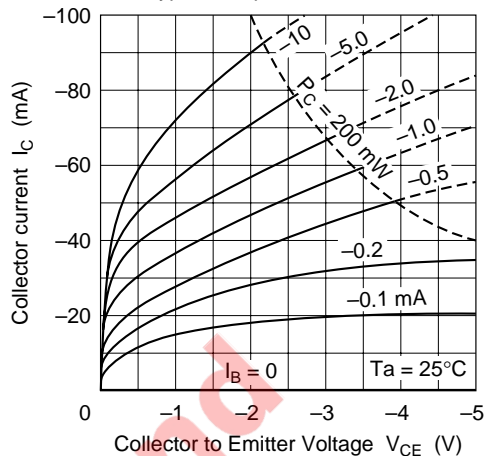
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-200	—	—	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-200	—	—	V	$I_C = -0.5 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10 \mu A, I_C = 0$
Collector cutoff current	$I_{CEO}$	—	—	-500	$\mu A$	$V_{CE} = -200 \text{ V}, R_{BE} = \infty$
DC current transfer ratio	$h_{FE}$	100	—	250		$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}^{*1}$
Collector to emitter saturation voltage	$V_{CE(sat)}$	—	—	-0.5	V	$I_C = -30 \text{ mA}, I_B = -3 \text{ mA}^{*1}$
Base to emitter voltage	$V_{BE}$	—	—	-1.0	V	$V_{CE} = -12 \text{ V}, I_C = -2 \text{ mA}^{*1}$

Note: 1. Pulse test

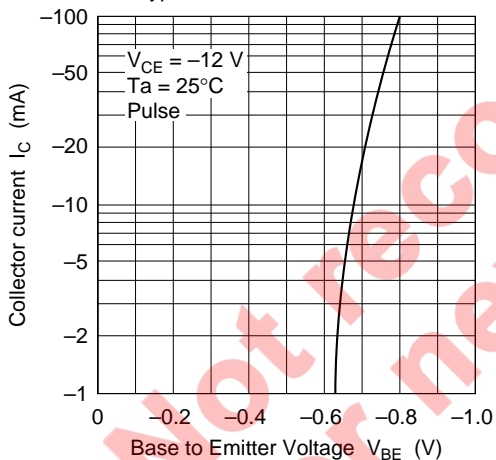
Maximum Collector Dissipation Curve



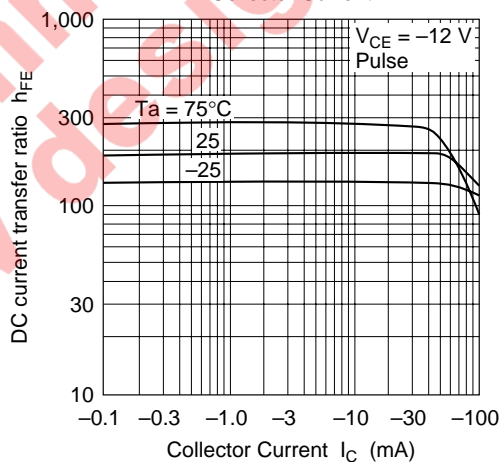
Typical Output Characteristics



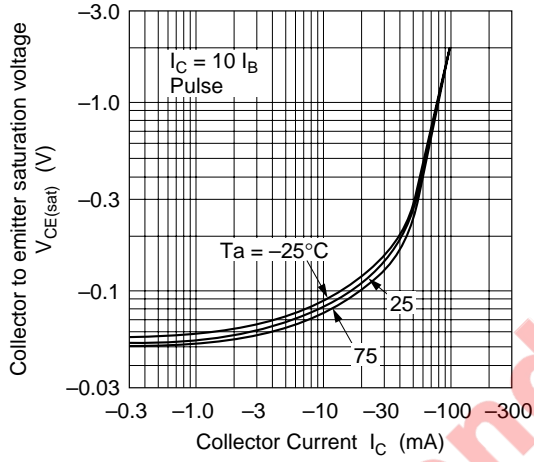
Typical Transfer Characteristics



DC Current Transfer Ratio vs. Collector Current



Collector to emitter Saturation Voltage  
vs. Collector Current



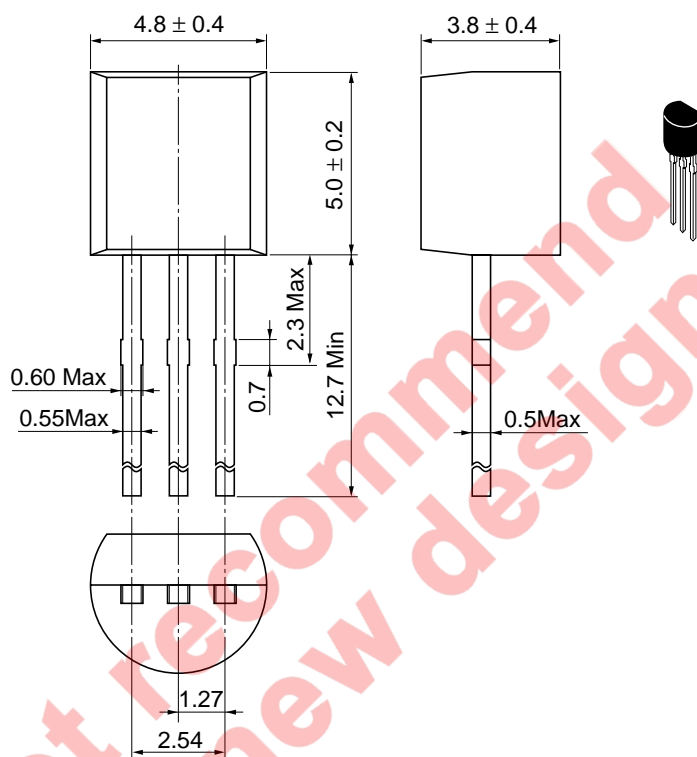
Not recommended  
for new design



## Package Dimensions

As of January, 2001

Unit: mm



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

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