

To all our customers

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

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Keep safety first in your circuit designs!

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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)

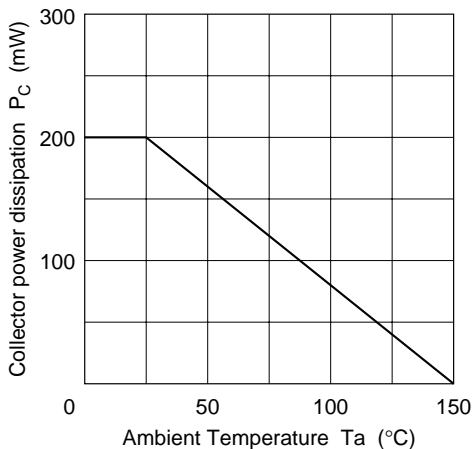
Item	Symbol	Ratings	Unit
Collector to base voltage	$V_{CBO}$	-200	V
Collector to emitter voltage	$V_{CEO}$	-200	V
Emitter to base voltage	$V_{EBO}$	-5	V
Collector current	$I_C$	-100	mA
Collector power dissipation	$P_C$	200	mW
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150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

## Electrical Characteristics (Ta = 25°C)

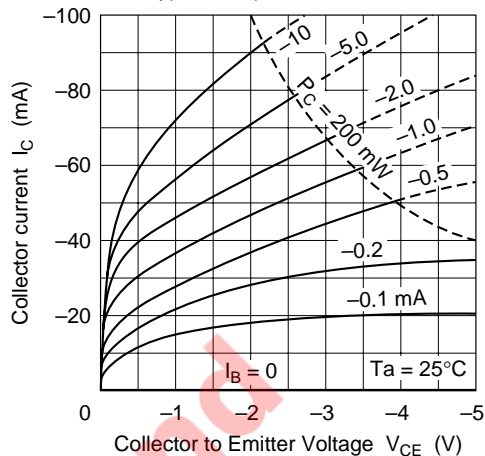
Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	$V_{(BR)CBO}$	-200	—	—	V	$I_C = -10 \mu A, I_E = 0$
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	-200	—	—	V	$I_C = -0.5 \text{ mA}, R_{BE} = \infty$
Emitter to base breakdown voltage	$V_{(BR)EBO}$	-5	—	—	V	$I_E = -10 \mu A, I_C = 0$
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

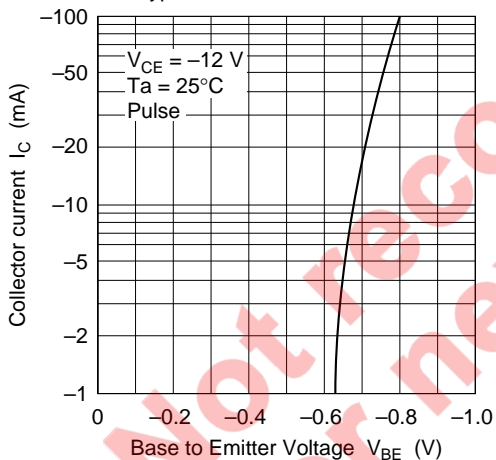
Maximum Collector Dissipation Curve



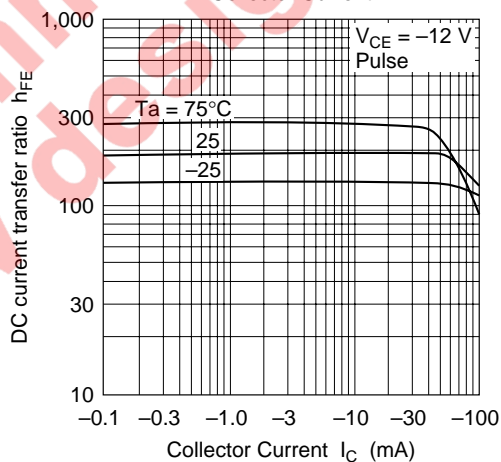
Typical Output Characteristics

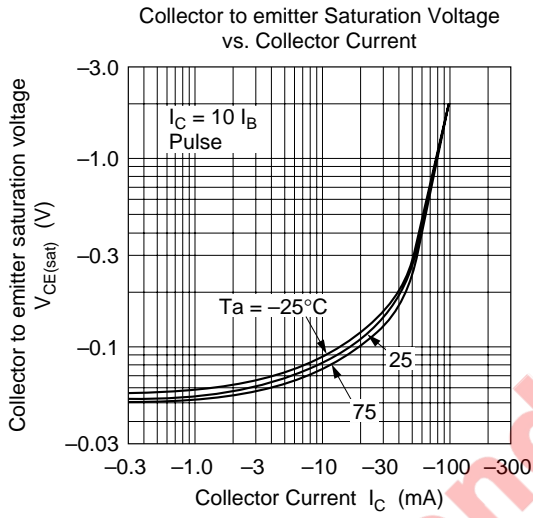


Typical Transfer Characteristics



DC Current Transfer Ratio vs. Collector Current



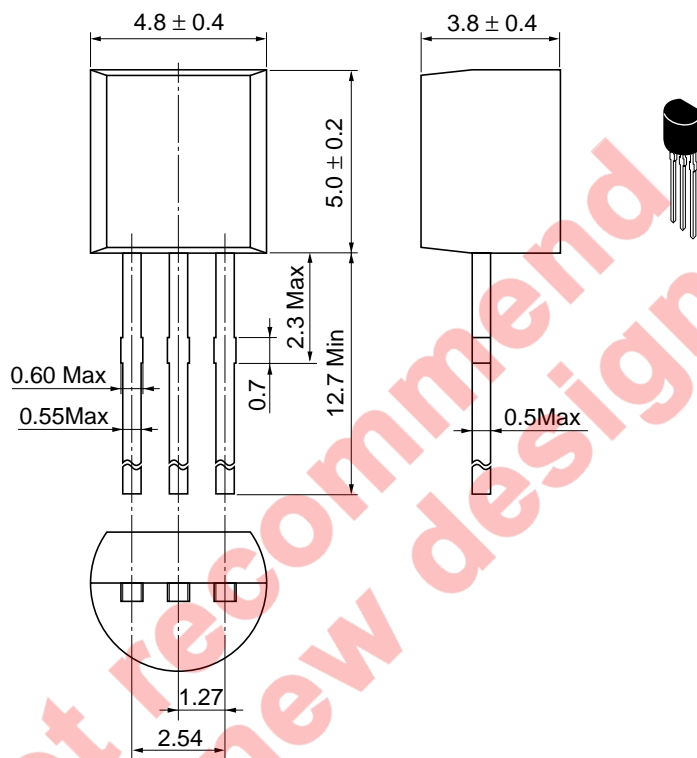


Not recommended  
for new design

## Package Dimensions

As of January, 2001

Unit: mm



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

## Cautions

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