

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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2SC1214

Silicon NPN Epitaxial

RENESAS

ADE-208-1050 (Z)

1st. Edition

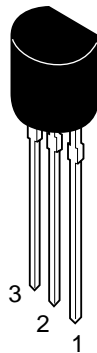
Mar. 2001

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}	50	V
Collector to emitter voltage	V _{CEO}	50	V
Emitter to base voltage	V _{EBO}	4	V
Collector current	I _C	500	mA
Collector power dissipation	P _C	600	mW
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	−55 to +150	°C

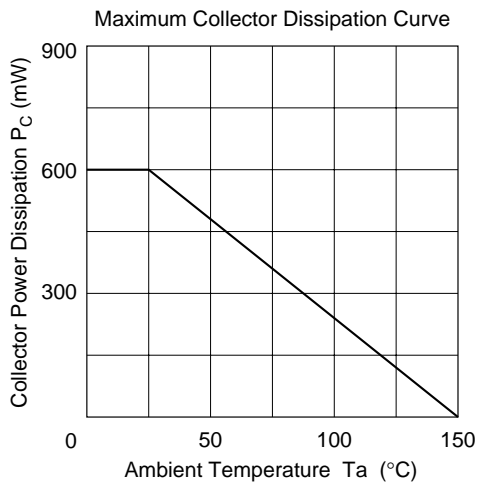
Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test conditions
Collector to base breakdown voltage	V _{(BR)CBO}	50	—	—	V	I _C = 10 μA, I _E = 0
Collector to emitter breakdown voltage	V _{(BR)CEO}	50	—	—	V	I _C = 1 mA, R _{BE} =
Emitter to base breakdown voltage	V _{(BR)EBO}	4	—	—	V	I _E = 10 μA, I _C = 0
Collector cutoff current	I _{CBO}	—	—	0.5	μA	V _{CB} = 20 V, I _E = 0
DC current transfer ratio	h _{FE} [*]	60	—	320		V _{CE} = 3 V, I _C = 10 mA
	h _{FE}	10	—	—		V _{CE} = 3 V, I _C = 500 mA (pulse test)
Collector to emitter saturation voltage	V _{CE(sat)}	—	0.2	0.6	V	I _C = 150 mA, I _B = 15 mA (Pulse test)
Base to emitter voltage	V _{BE}	—	0.64	—	V	V _{CE} = 3 V, I _C = 10 mA

Note: 1. The 2SC1214 is grouped by h_{FE} as follows.

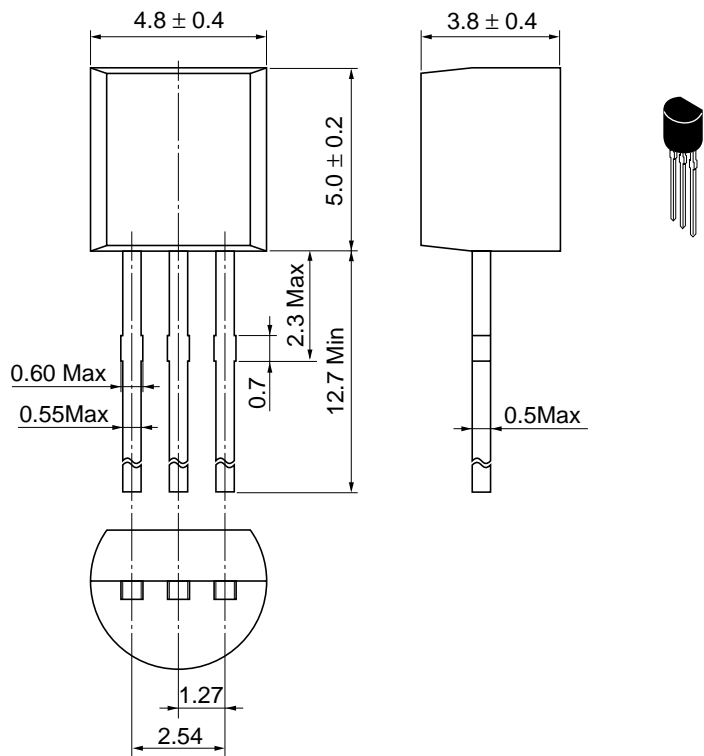
B	C	D
60 to 120	100 to 200	160 to 320

See characteristic curves of 2SC1213.



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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