

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!

1. Renesas Technology Corporation puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage.

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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HSK120

Silicon Epitaxial Planar Diode for High Speed Switching

RENESAS

ADE-208-171C(Z)

Rev. 3
Jan. 1999

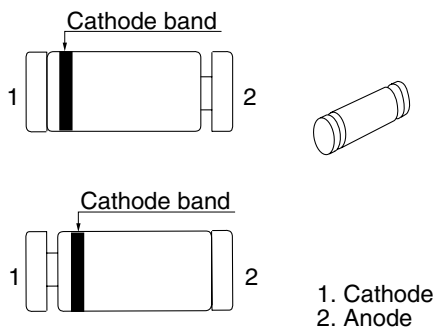
Features

- Low reverse recovery time. (t_{rr} = 3.0ns max)
- LLD package is suitable for high density surface mounting and high speed assembly

Ordering Information

Type No.	Cathode band	Package Code
HSK120	White	LLD

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	70	V
Reverse voltage	V_R	60	V
Peak forward current	I_{FM}	450	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*1}	4	A
Average rectified current	I_O	150	mA
Junction temperature	T_j	175	°C
Storage temperature	T_{stg}	-65 to +175	°C

Note 1. Within 1μs forward surge current..

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.8	V	$I_F = 10 \text{ mA}$
Reverse voltage	V_R	70	—	—	V	$I_R = 5\mu\text{A}$
Reverse current	I_R	—	—	0.1	μA	$V_R = 60\text{V}$
Capacitance	C	—	—	3.0	pF	$V_R = 0\text{V}$, $f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}	—	—	3.0	ns	$I_F = 10 \text{ mA}$, $V_R = 6\text{V}$, $R_L = 50\Omega$, $I_{rr} = 0.1I_R$

Main Characteristic

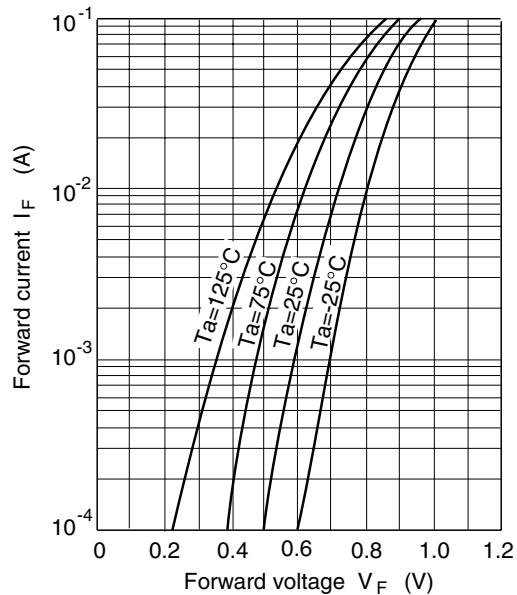


Fig.1 Forward current Vs. Forward voltage

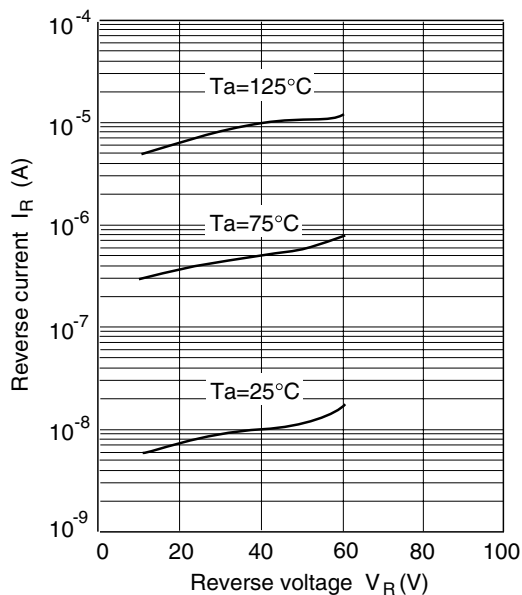


Fig.2 Reverse current Vs. Reverse voltage

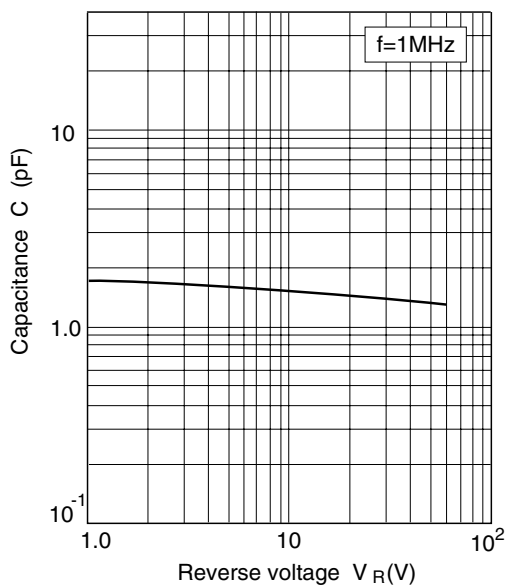
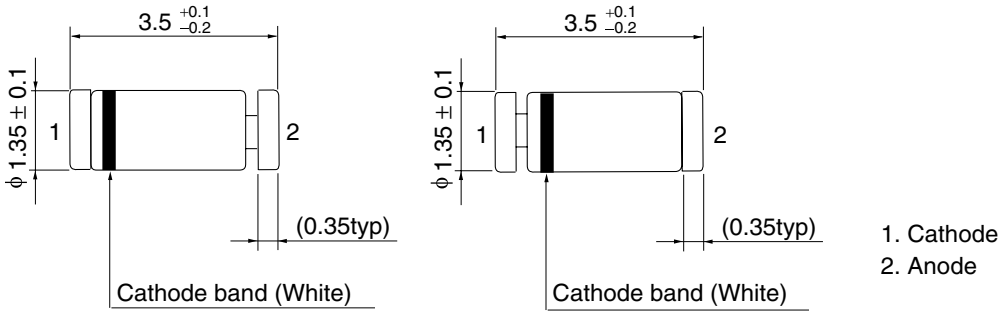


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



() : Reference only

Hitachi Code	LLD
JEDEC Code	—
EIAJ Code	—
Weight(g)	0.027

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