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

April 1st, 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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HSK83

Silicon Epitaxial Planar Diode for High Voltage Switching

REJ03G0191-0400Z
 (Previous: ADE-208-169C)
 Rev.4.00
 Mar.22.2004

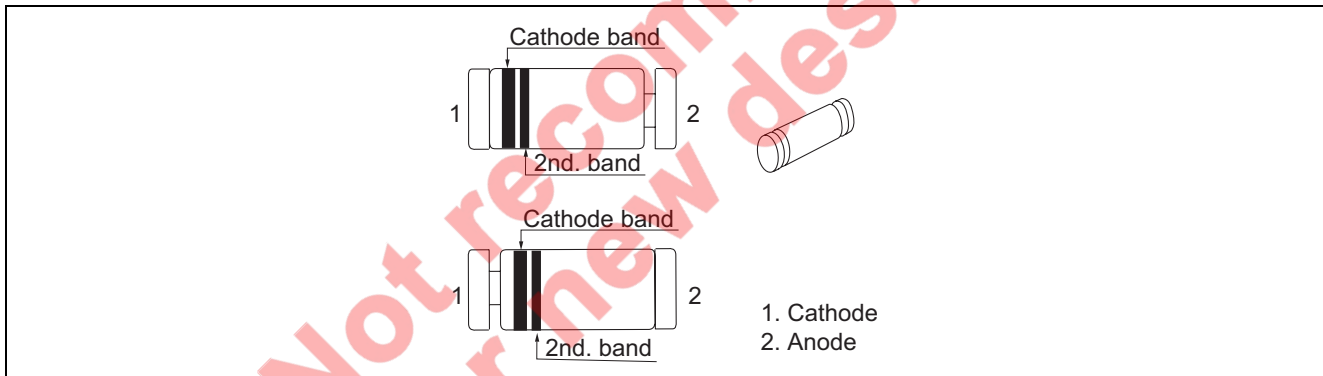
Features

- High reverse voltage. ($V_R = 250\text{ V}$)
- LLD package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Cathode band	2nd band	Package Code
HSK83	White	Verdure	LLD

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V _{RM}	300	V
Reverse voltage	V _R	250	V
Peak forward current	I _{FM}	625	mA
Non-Repetitive peak forward surge current	I _{FSM} *1	1	A
Average rectified current	I _O	150	mA
Junction temperature	T _j	175	°C
Storage temperature	T _{stg}	-65 to +175	°C

Note: 1. Value at duration of 1s.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V _F	—	—	1.0	V	I _F = 100 mA
Reverse current	I _{R1}	—	—	0.1	μA	V _R = 250 V
	I _{R2}	—	—	100		V _R = 300 V
Capacitance	C	—	1.5	—	pF	V _R = 0 V, f = 1 MHz
Reverse recovery time	t _{rr}	—	—	100	ns	I _F = I _R = 30 mA, I _{rr} = 3 mA, R _L = 100 Ω

Not recommended for new designs

Main Characteristics

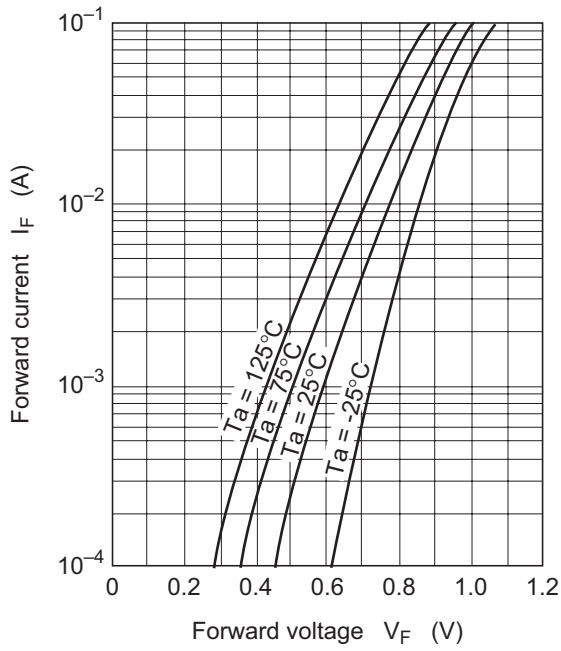


Fig.1 Forward current vs. Forward voltage

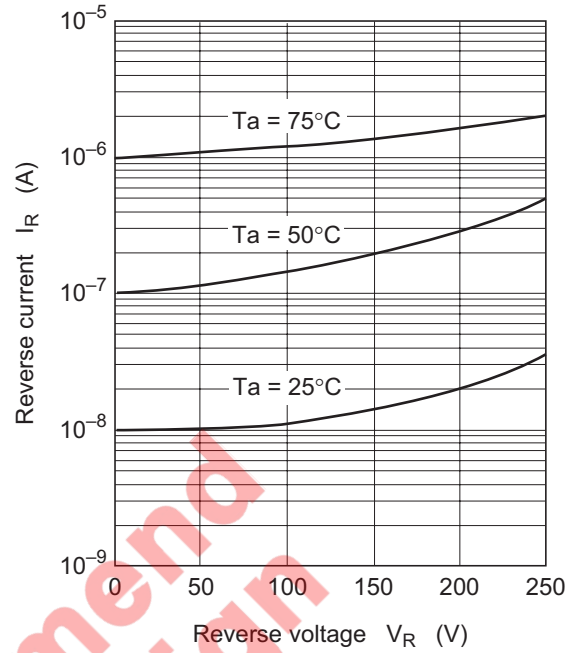


Fig.2 Reverse current vs. Reverse voltage

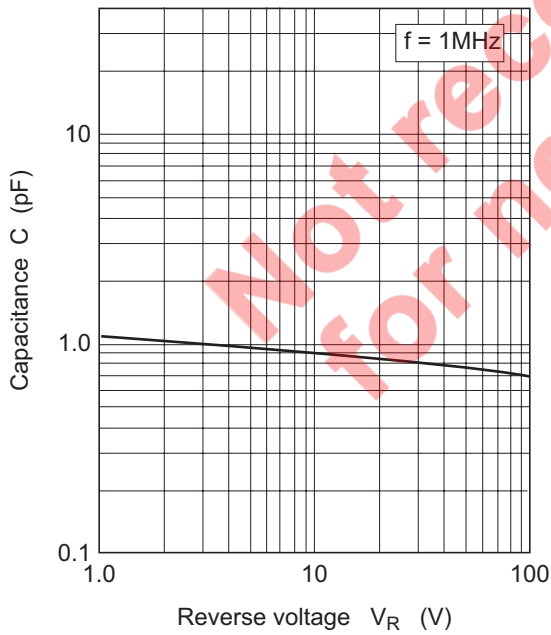
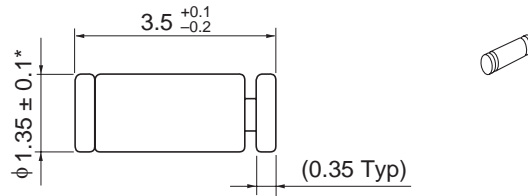


Fig.3 Capacitance vs. Reverse voltage

Package Dimensions

As of January, 2003
Unit: mm



* HSK122: $\phi 1.4 \pm 0.1$ type

Package Code	LLD
JEDEC	—
JEITA	—
Mass (reference value)	0.027 g

Not recommended
for new design

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