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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

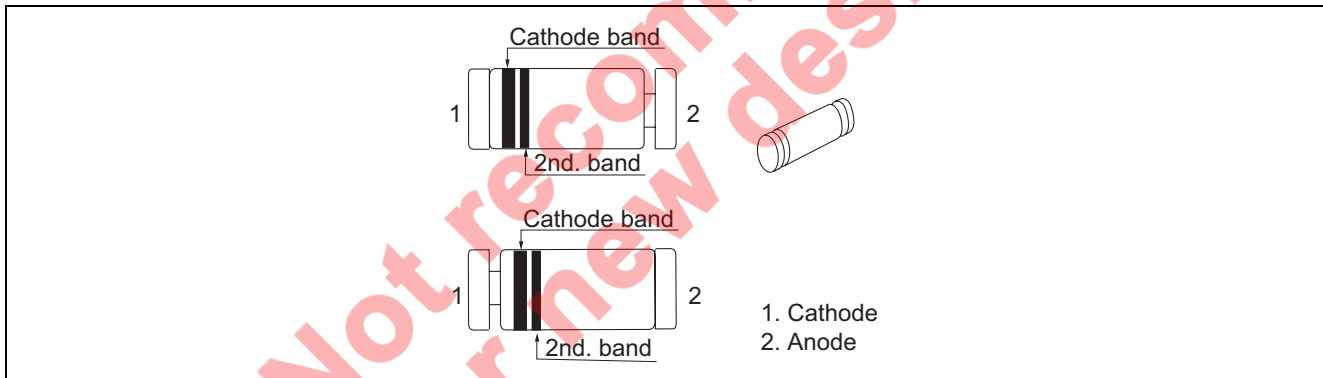
Features

- 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	$I_F = 100 \text{ mA}$
Reverse current	I_{R1}	—	—	0.1	μA	$V_R = 250 \text{ V}$
	I_{R2}	—	—	100		$V_R = 300 \text{ V}$
Capacitance	C	—	1.5	—	pF	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}	—	—	100	ns	$I_F = I_R = 30 \text{ mA}, I_{rr} = 3 \text{ mA}, R_L = 100 \Omega$

Not recommended for new design

Main Characteristics

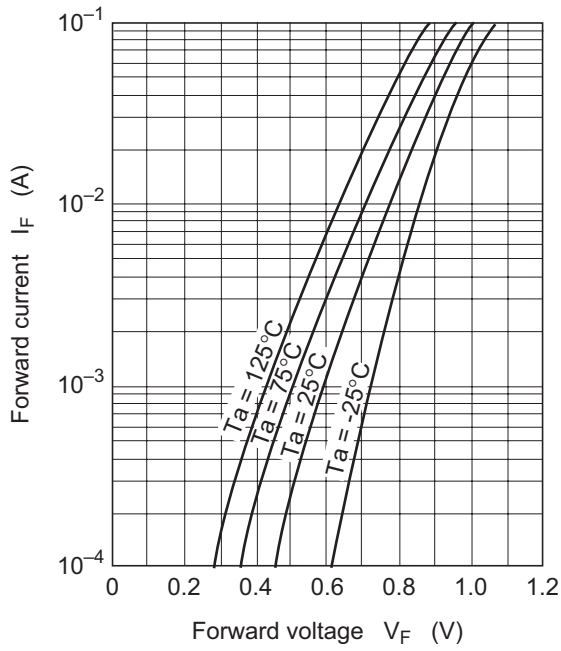


Fig.1 Forward current vs. Forward voltage

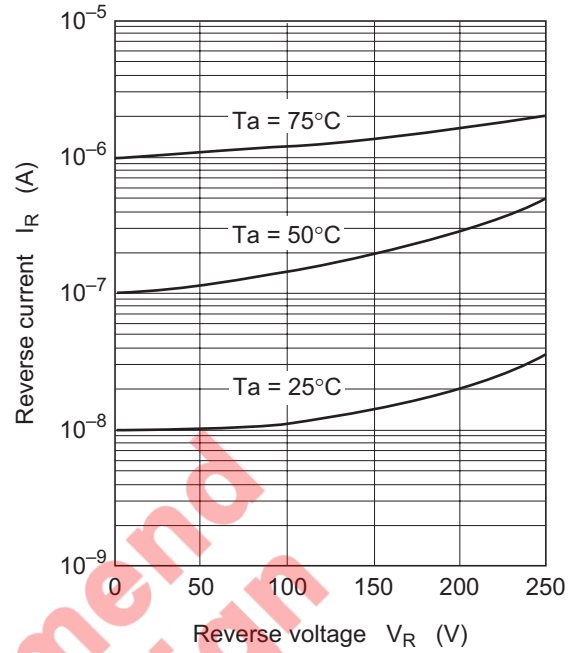


Fig.2 Reverse current vs. Reverse voltage

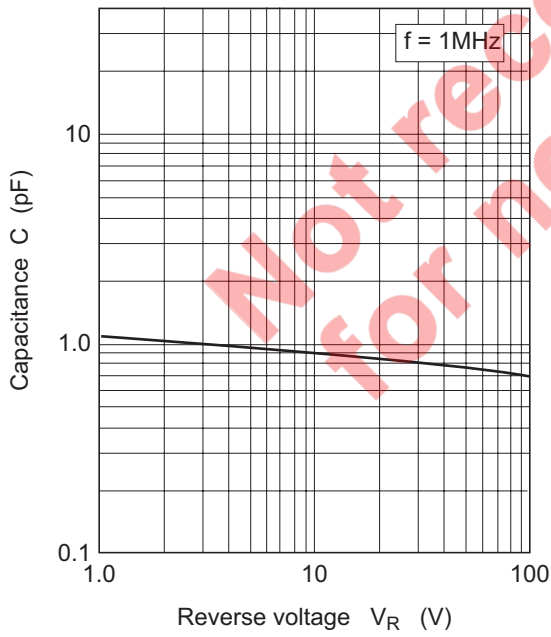
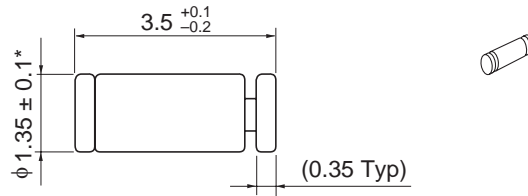


Fig.3 Capacitance vs. Reverse voltage

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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