

# HSK83

## Silicon Epitaxial Planar Diode for High Voltage Switching

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

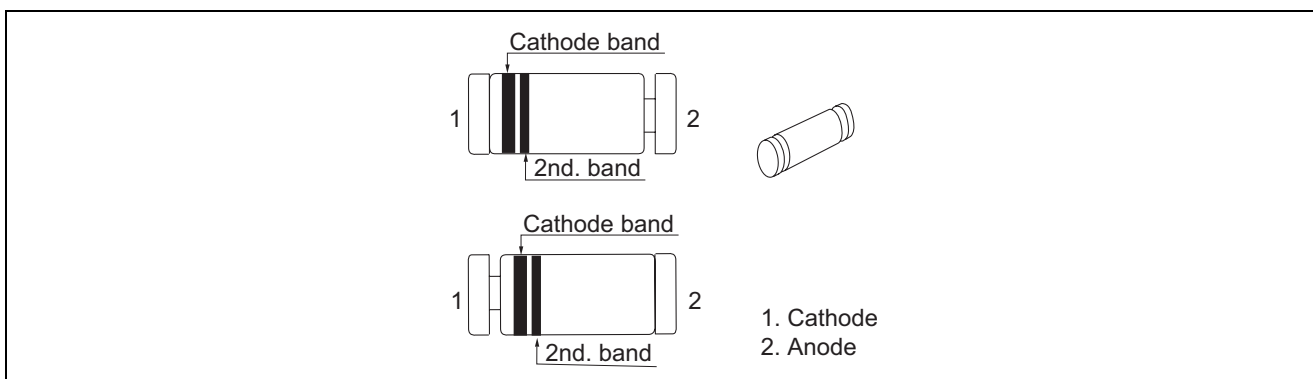
### Features

- 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 <sub>RM</sub>	300	V
Reverse voltage	V <sub>R</sub>	250	V
Peak forward current	I <sub>FM</sub>	625	mA
Non-Repetitive peak forward surge current	I <sub>FSM</sub> *1	1	A
Average rectified current	I <sub>O</sub>	150	mA
Junction temperature	T <sub>j</sub>	175	°C
Storage temperature	T <sub>stg</sub>	-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 <sub>F</sub>	—	—	1.0	V	I <sub>F</sub> = 100 mA
Reverse current	I <sub>R1</sub>	—	—	0.1	μA	V <sub>R</sub> = 250 V
	I <sub>R2</sub>	—	—	100		V <sub>R</sub> = 300 V
Capacitance	C	—	1.5	—	pF	V <sub>R</sub> = 0 V, f = 1 MHz
Reverse recovery time	t <sub>rr</sub>	—	—	100	ns	I <sub>F</sub> = I <sub>R</sub> = 30 mA, I <sub>rr</sub> = 3 mA, R <sub>L</sub> = 100 Ω

## Main Characteristics

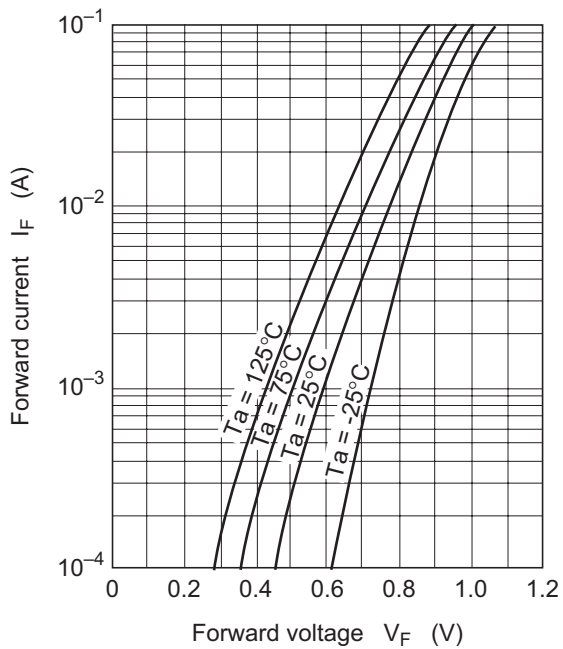


Fig.1 Forward current vs. Forward voltage

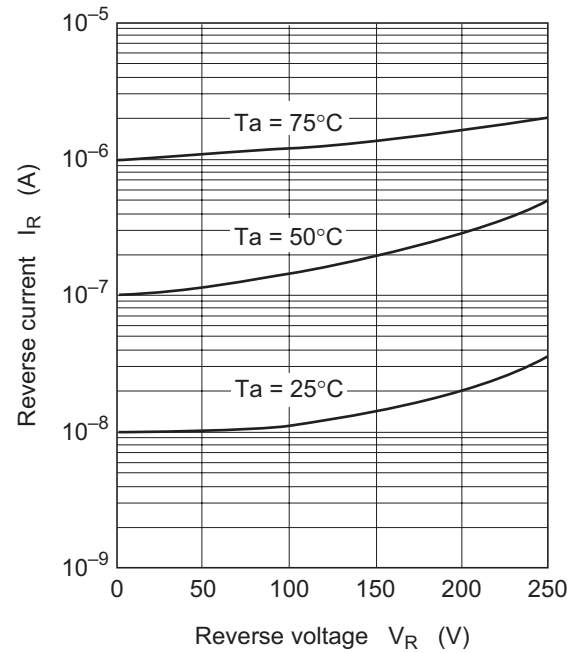


Fig.2 Reverse current vs. Reverse voltage

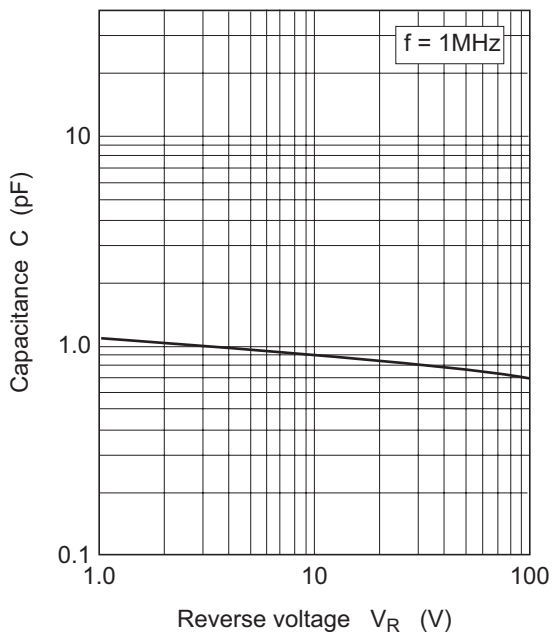
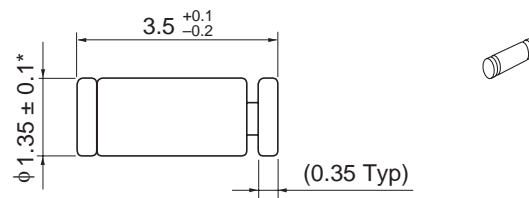


Fig.3 Capacitance vs. Reverse voltage

# 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

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