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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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HSS81

Silicon Epitaxial Planar Diode for High Voltage Switching



ADE-208-175B (Z)

Rev.2
Oct. 2000

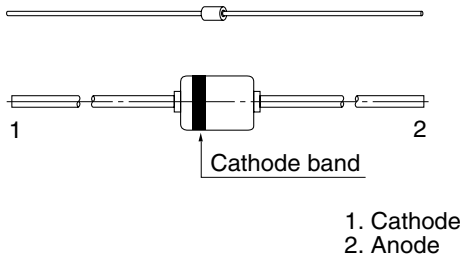
Features

- High reverse voltage. ($V_R = 150\text{ V}$)
- Suitable for 5 mm pitch high speed automatic insertion.
- Small glass package (MHD) enables easy mounting and high reliability.

Ordering Information

Type No.	Cathode band	Package Code
HSS81	Green	MHD

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}^{*1}	200	V
Reverse voltage	V_R	150	V
Peak forward current	I_{FM}	625	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*2}	1	A
Average forward current	I_O	150	mA
Power dissipation	Pd	400	mW
Junction temperature	Tj	200	°C
Storage temperature	Tstg	-65 to +175	°C

Notes: 1. Reverse voltage in excess of peak reverse voltage may deteriorate electrical characteristic.

2. Within 1s forward surge current.

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}	—	—	0.2	μA	$V_R = 150 \text{ V}$
	I_{R2}	—	—	100		$V_R = 200 \text{ V}$
Capacitance	C	—	1.5	—	pF	$V_R = 0 \text{ V}$, $f = 1 \text{ MHz}$
Reverse recovery time	t_{rr}	—	—	100	ns	$I_F = I_R = 30 \text{ mA}$, $I_{rr} = 3\text{mA}$, $R_L = 100 \Omega$

Main Characteristic

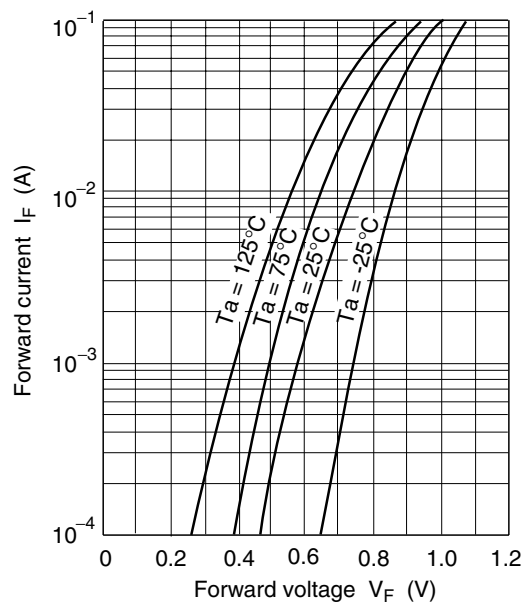


Fig.1 Forward current Vs. Forward voltage

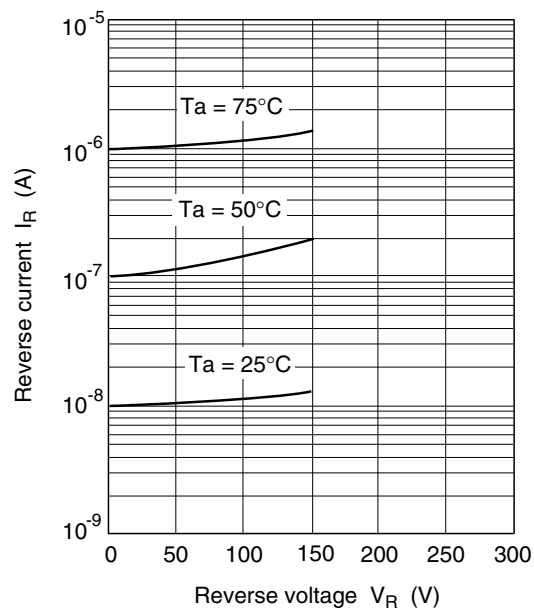


Fig.2 Reverse current Vs. Reverse voltage

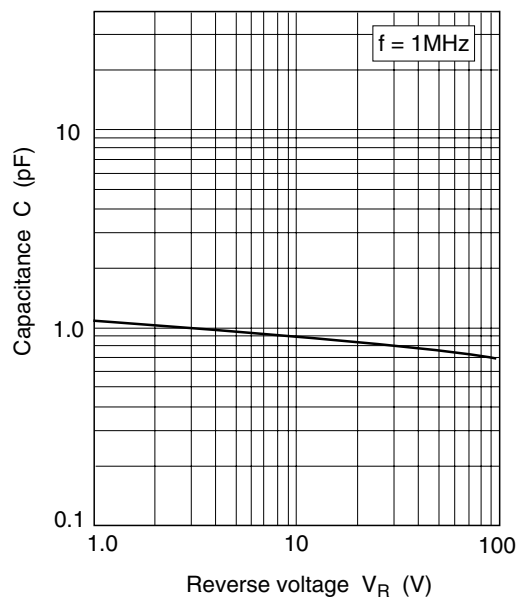
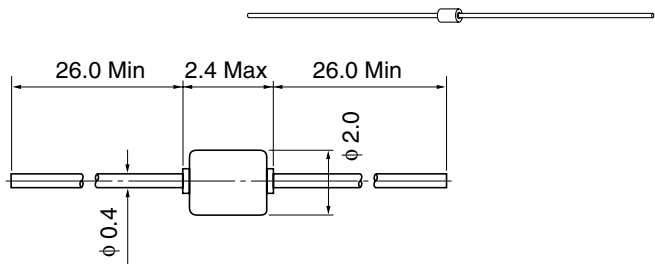


Fig.3 Capacitance Vs. Reverse voltage

Package Dimensions

Unit: mm



Hitachi Code	MHD
JEDEC	Conforms
EIAJ	—
Mass (reference value)	0.084 g

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