

# HSR101

## Silicon Schottky Barrier Diode for Various detector, High speed switching

# HITACHI

Rev. 3  
Oct. 1995

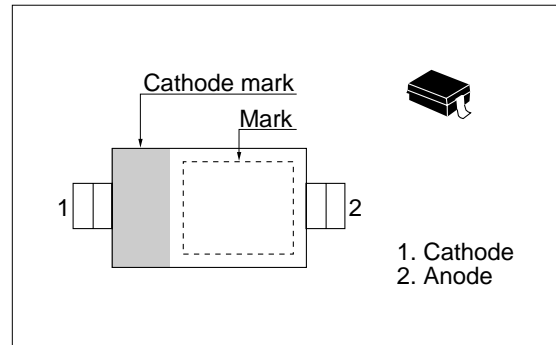
### Features

- Low forward voltage, High efficiency.
- Low reverse current .
- Small Resin Package (SRP) is suitable for surface mount design.

### Ordering Information

Type No.	Laser Mark	Package Code
HSR101	1	SRP

### Outline



### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	$V_R$	30	V
Forward current	$I_F$	35	mA
Junction temperature	$T_j$	100	°C
Storage temperature	$T_{stg}$	-55 to +100	°C

### Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse voltage	$V_R$	30	—	—	V	$I_R = 10 \mu A$
Reverse current	$I_R$	—	—	10	nA	$V_R = 10 V$
Forward voltage	$V_F$	—	—	0.70	V	$I_F = 10 mA$
Capacitance	C	—	—	1.50	pF	$V_R = 0 V, f = 1 MHz$
Capacitance deviation	$\Delta C$	—	—	0.10	pF	$V_R = 0 V, f = 1 MHz$
Forward voltage deviation	$\Delta V_F$	—	—	10	mV	$I_F = 10 mA$
ESD-Capability	—	10	—	—	V	*C=200pF, Both forward and reverse direction 1 pulse.

\* Failure criterion ;  $I_R \geq 20nA$  at  $V_R = 10V$ .

\*\* Each group shall uniform a multiple of 4 diodes.

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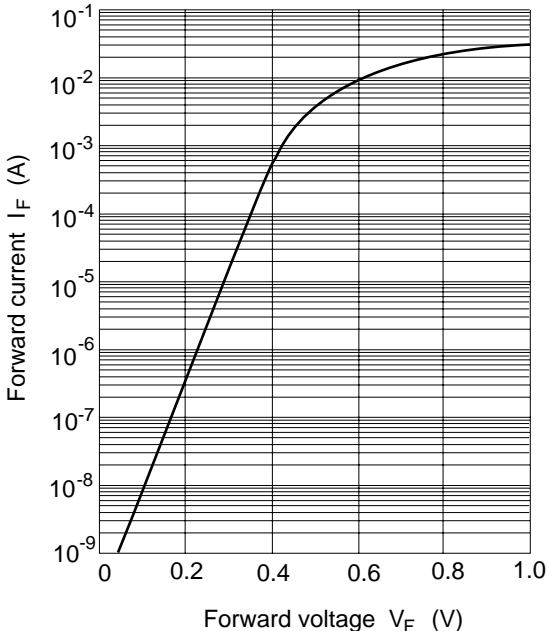


Fig.1 Forward current Vs. Forward voltage

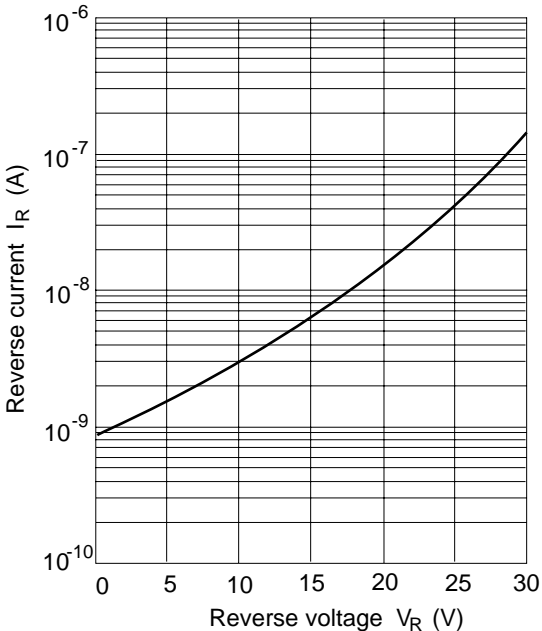


Fig.2 Reverse current Vs. Reverse voltage

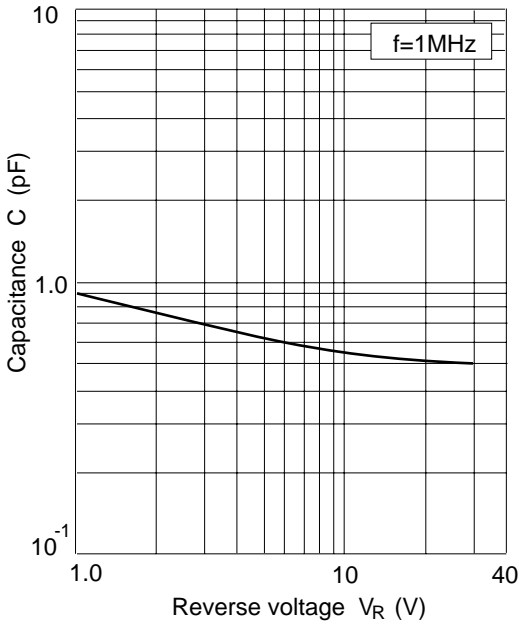


Fig.3 Capacitance Vs. Reverse voltage

### Package Dimensions

Unit: mm

