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# HSR101

Silicon Schottky Barrier Diode for Various detector,  
High speed switching

**HITACHI**

ADE-208-080C (Z)  
Rev. 3

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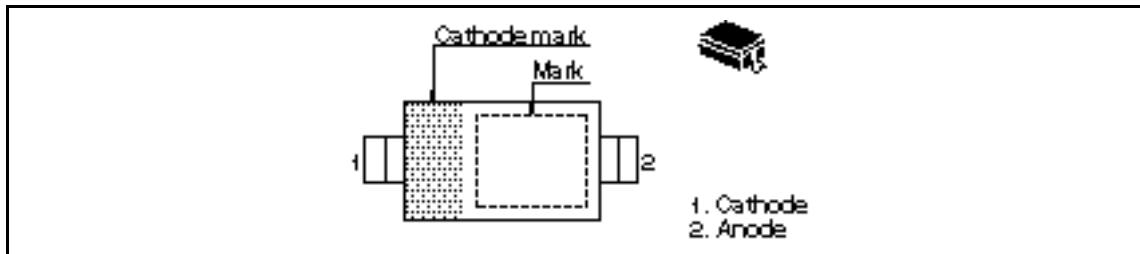
## Features

- 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 ( $T_a = 25^\circ\text{C}$ )

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



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### Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

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

Notes: 1. Failure criterion;  $I_R = 20\text{nA}$  at  $V_R = 10\text{V}$ .  
2. Each group shall uniform a multiple of 4 diodes.

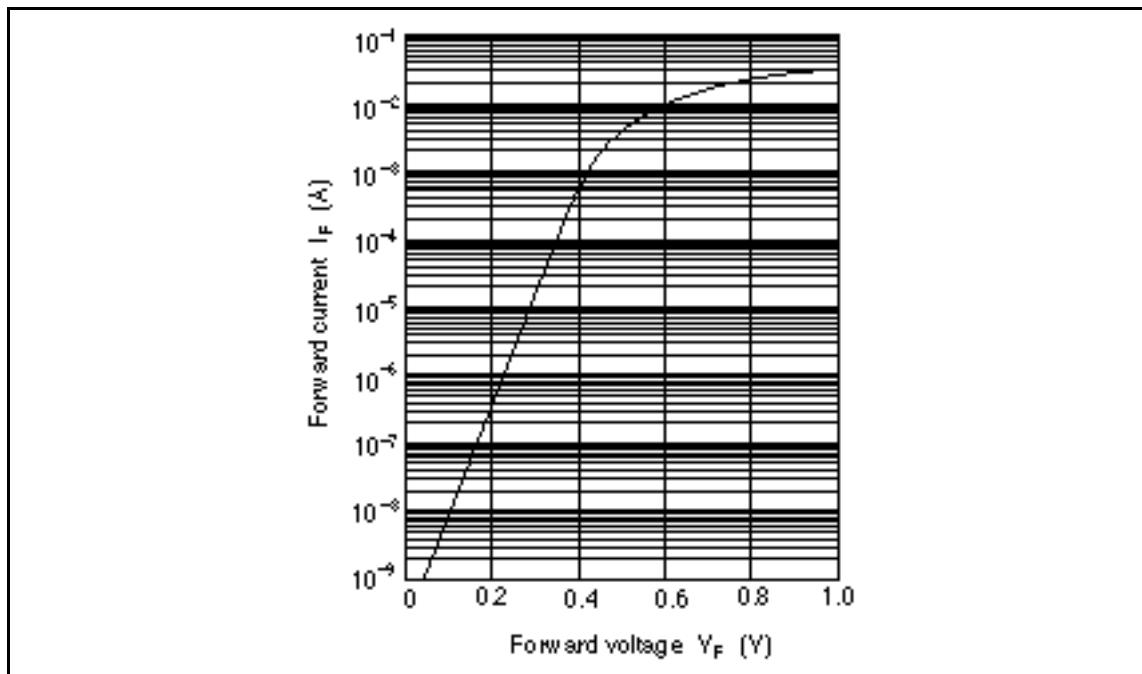
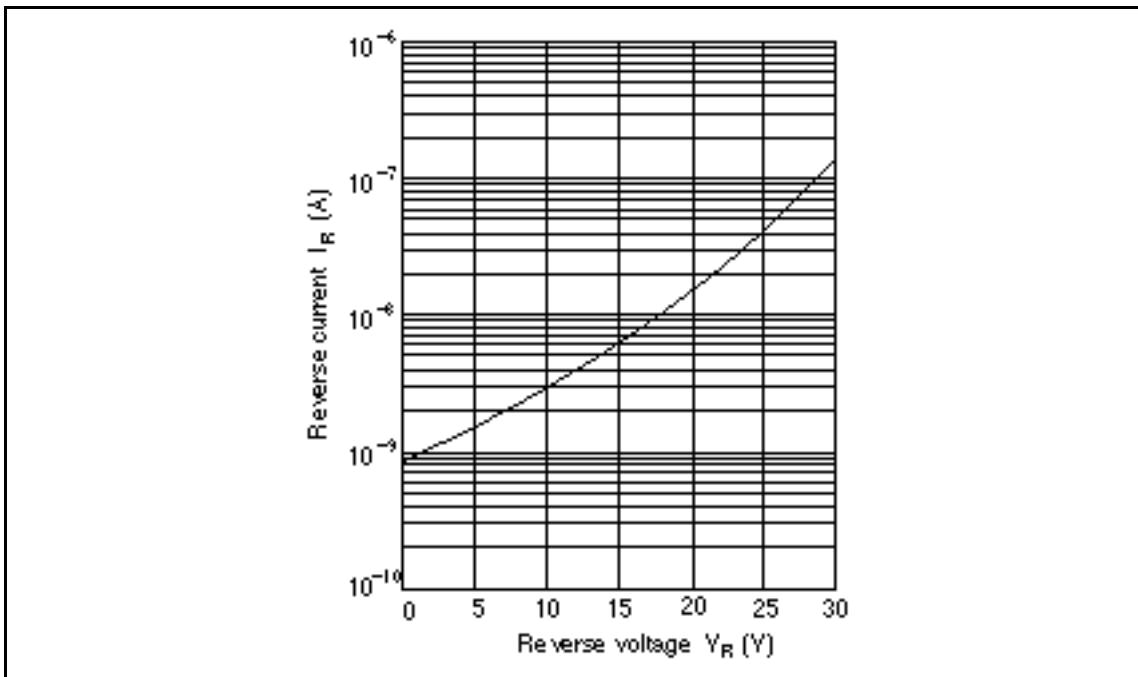
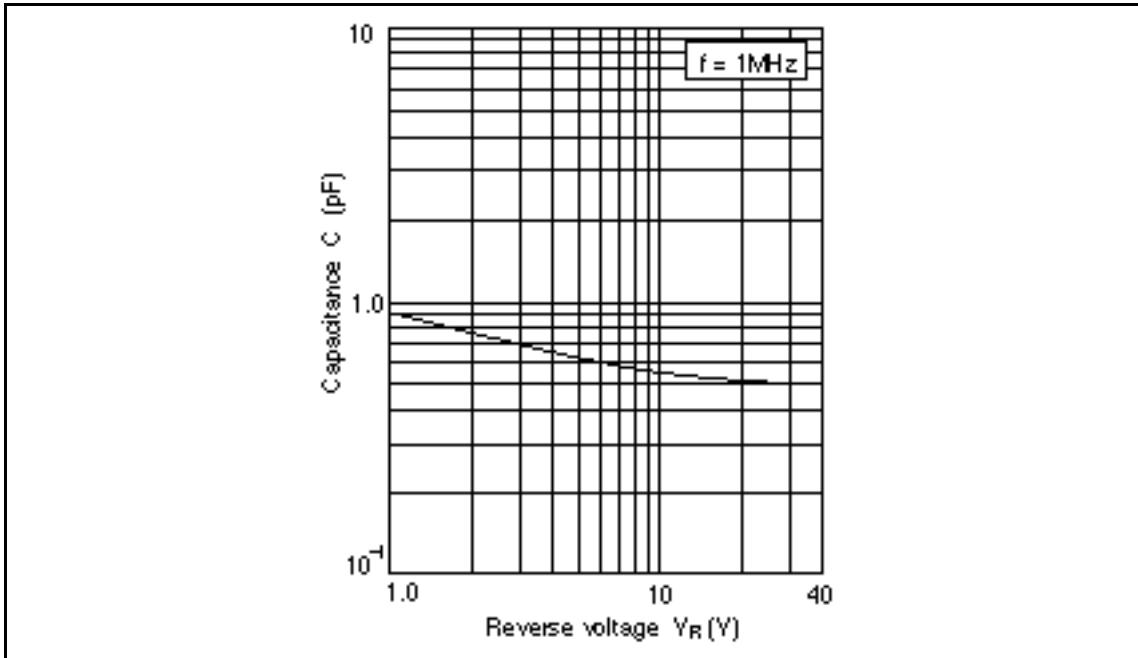


Fig.1 Forward current Vs. Forward voltage



**Fig.2 Reverse current Vs. Reverse voltage**



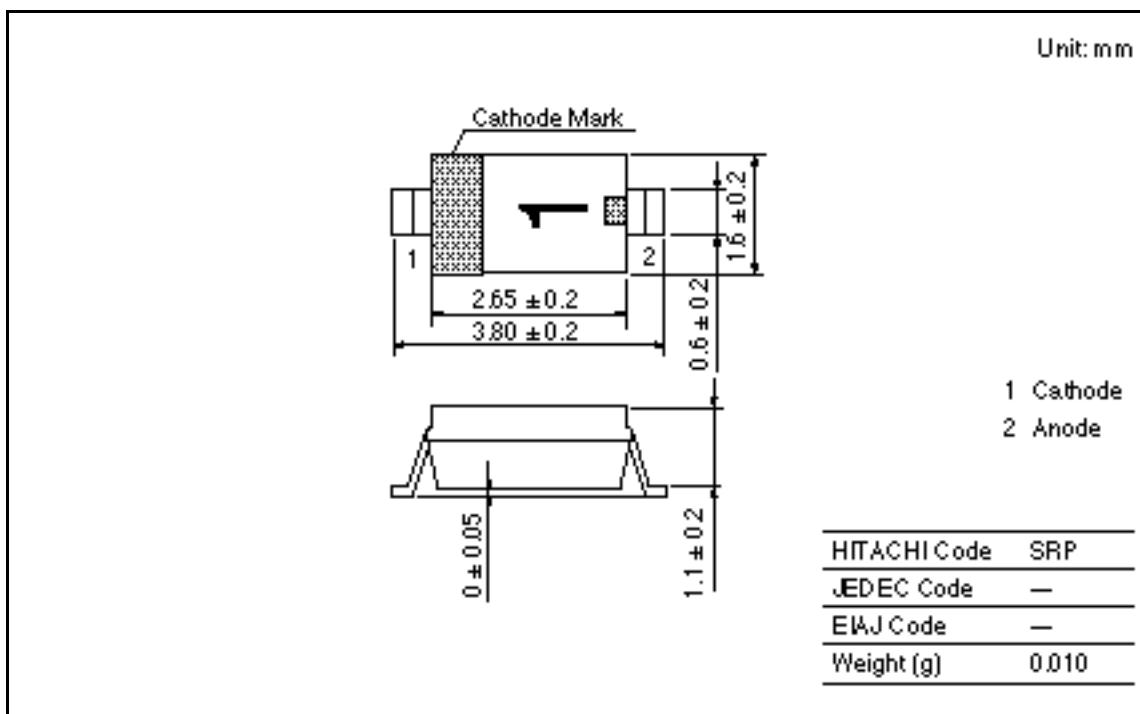
**Fig.3 Capacitance Vs. Reverse voltage**

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### Package Dimensions



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