
HSR101

Silicon Schottky Barrier Diode
for Various detector, High speed switching

HITACHI

ADE-208-080D (Z)

Rev. 4

Sept. 1, 1998

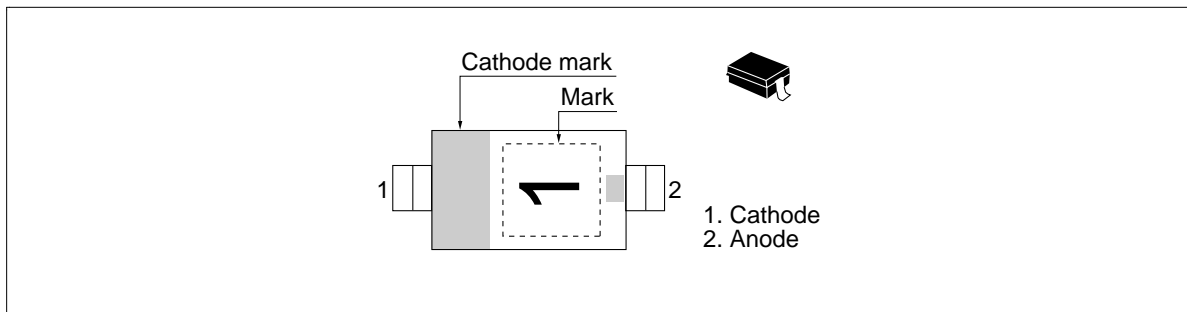
Features

- 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



HSR101

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	125	°C
Storage temperature	T_{stg}	-55 to +125	°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	ΔC	—	—	0.10	pF	$V_R = 0 V, f = 1 MHz$
Forward voltage deviation	ΔV_F	—	—	10	mV	$I_F = 10 mA$
ESD-Capability ^{*1}	—	—	—	—	V	C=200pF , Both forward and reverse direction 1 pulse.

Notes 1. Failure criterion ; $I_R \geq 20 nA$ at $V_R = 10 V$

Notes 2. Each group shall uniform a multiple of 4 diodes.

Main Characteristic

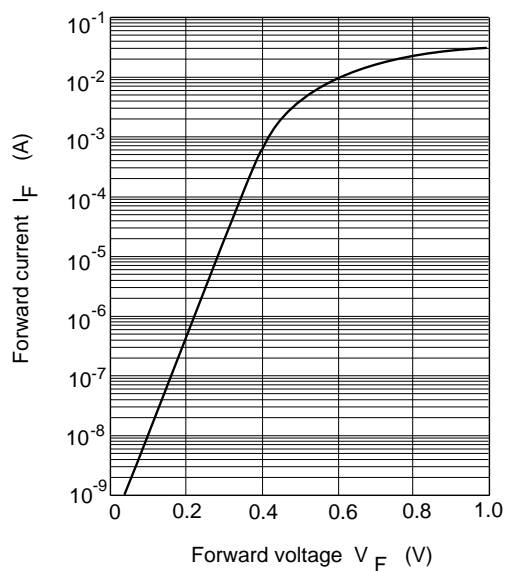


Fig.1 Forward current Vs. Forward voltage

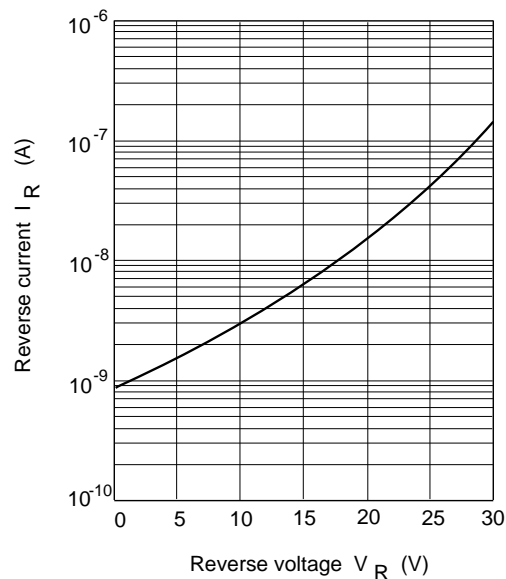


Fig.2 Reverse current Vs. Reverse voltage

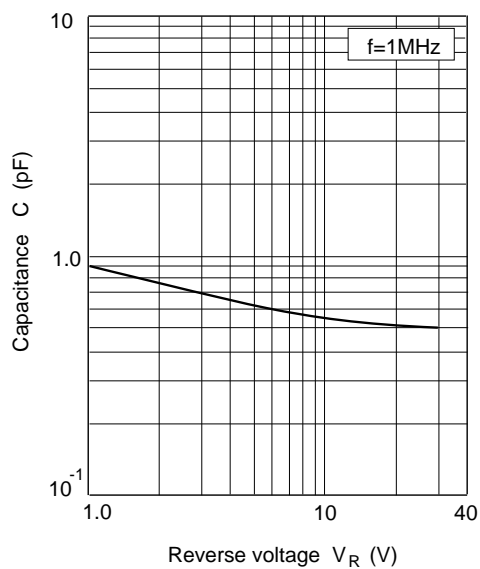
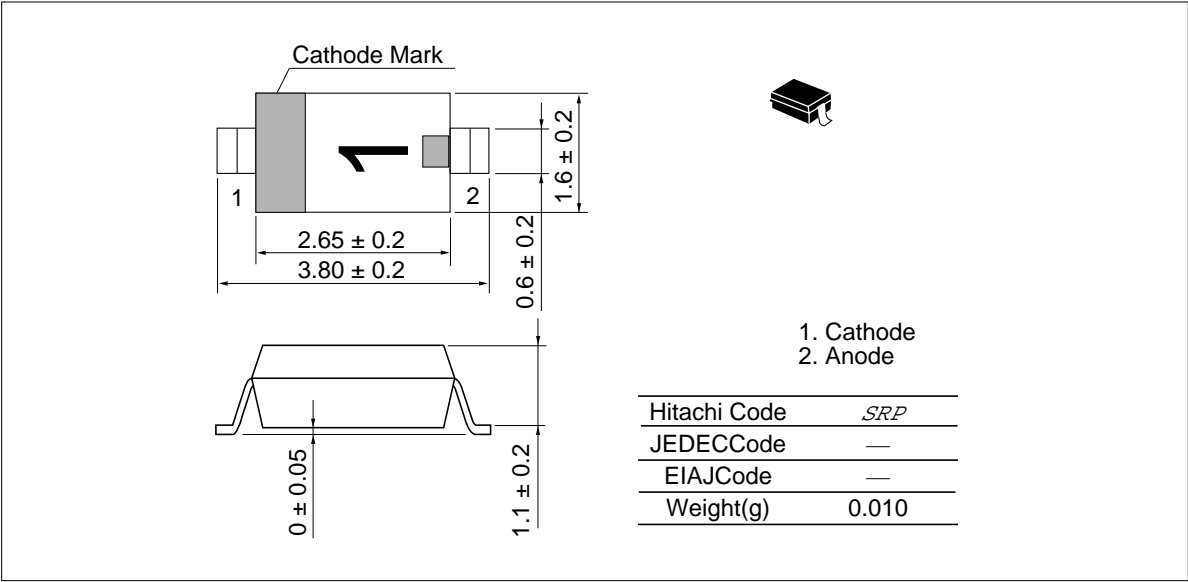


Fig.3 Capacitance Vs. Reverse voltage

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Package Dimensions (Unit : mm)



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