

# HRU0302A

Silicon Schottky Barrier Diode for Rectifying

# HITACHI

ADE-208-235G(Z)

Rev 7

Jul. 1998

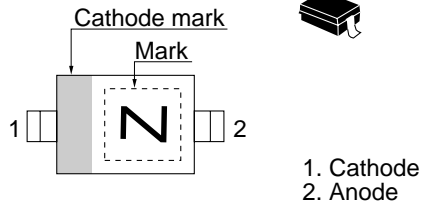
## Features

- Low forward voltage drop and suitable for high efficiency rectifying.
- Ultra small Resin Package (URP) is suitable for high density surface mounting and high speed assembly.

## Ordering Information

Type No.	Laser Mark	Package Code
HRU0302A	Z	URP

## Outline



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

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	$V_{RRM}^{*1}$	20	V
Average rectified current	$I_O^{*1}$	300	mA
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	3	A
Junction temperature	Tj	125	°C
Storage temperature	Tstg	-55 to +125	°C

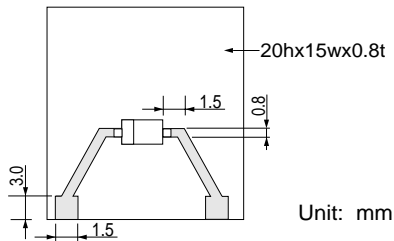
Notes 1. See from Fig.4 to Fig.6

Notes 2. 10msec sine wave 1 pulse

## Electrical Characteristics (Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	0.40	V	$I_F = 300 \text{ mA}$
Reverse current	$I_R$	—	—	100	$\mu\text{A}$	$V_R = 20\text{V}$
Capacitance	C	—	70	—	pF	$V_R = 0\text{V}, f = 1 \text{ MHz}$
Thermal resistance	$R_{th(j-a)}$	—	440	—	°C/W	Polyimide board <sup>*1</sup>

Notes 1. Polyimide board



Main Characteristic

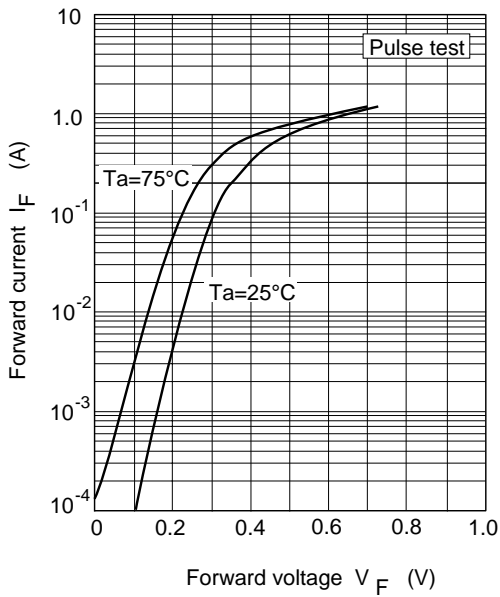


Fig.1 Forward current Vs. Forward voltage

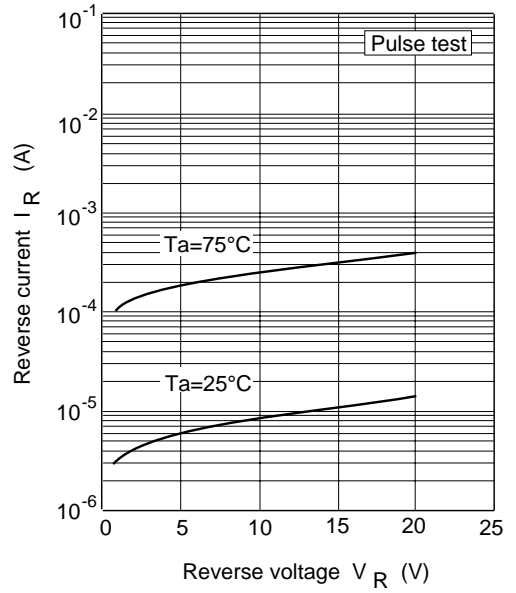


Fig.2 Reverse current Vs. Reverse voltage

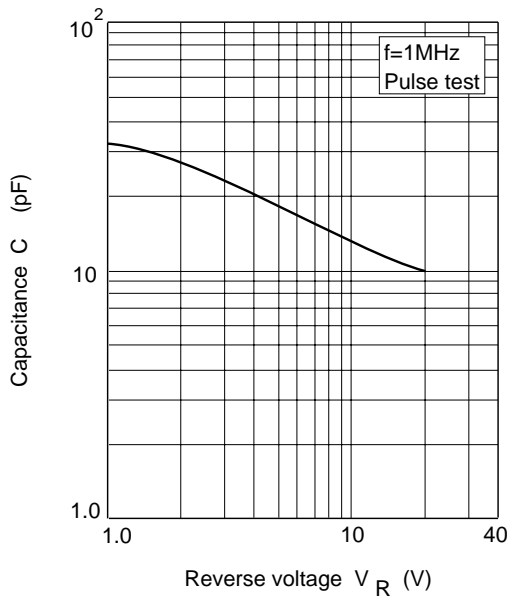


Fig.3 Capacitance Vs. Reverse voltage

**Main Characteristic**

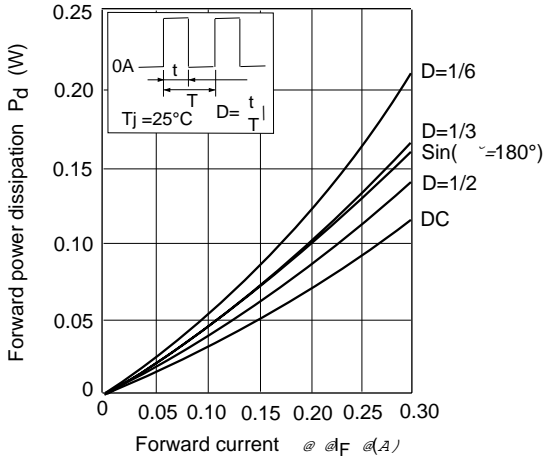


Fig4. Forward power dissipation Vs. Forward current

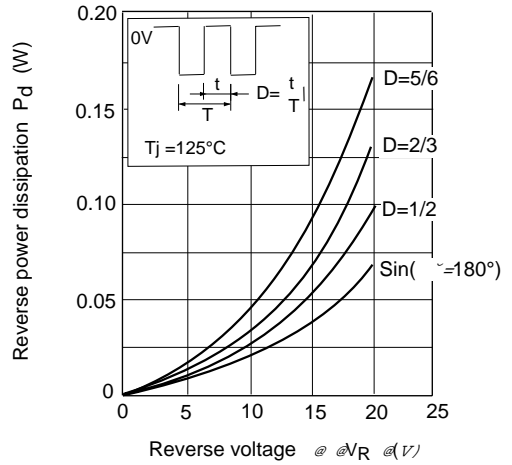


Fig5. Reverse power dissipation Vs. Reverse voltage

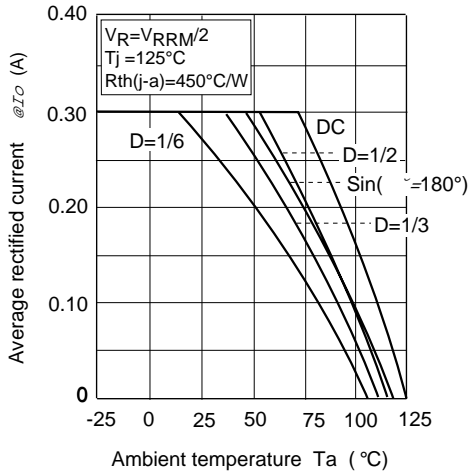
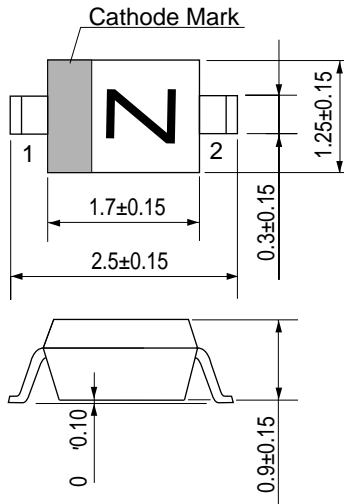


Fig.6 Average rectified current Vs. Ambient temperature

Package Dimensions

Unit : mm



- 1. Cathode
- 2. Anode

Hitachi Code	URP
JEDECCode	—
EIAJCode	—
Weight(g)	0.004

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