HRU0302A

Silicon Schottky Barrier Diode for Rectifying

REJ03G0151-1000
Rev.10.00
Mar 31, 2006

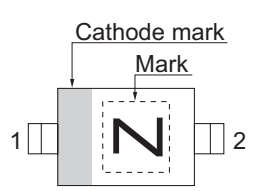
Features

- 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 Name	Package Code (Previous Code)
HRU0302A	Z	URP	PTSP0002ZA-A

Pin Arrangement



1. Cathode
2. Anode

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

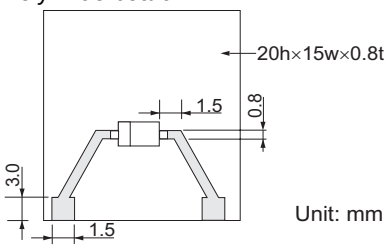
Notes: 1. See from Fig.4 to Fig.6.
2. 10 ms sine wave 1 pulse.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	0.40	V	I_F = 300 mA
Reverse current	I_R	—	—	100	µA	V_R = 20 V
Capacitance	C	—	70	—	pF	V_R = 0 V, f = 1 MHz
Thermal resistance	Rth(j-a)	—	440	—	°C/W	Polyimide board *1

Note: 1. Polyimide board



Main Characteristic

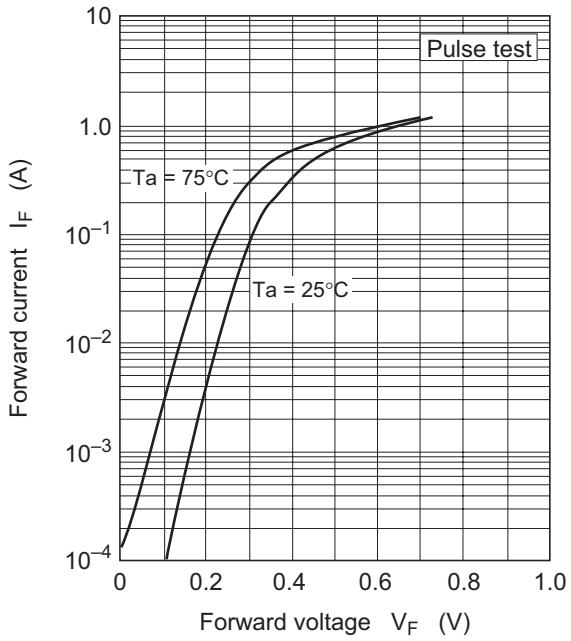


Fig.1 Forward current vs. Forward voltage

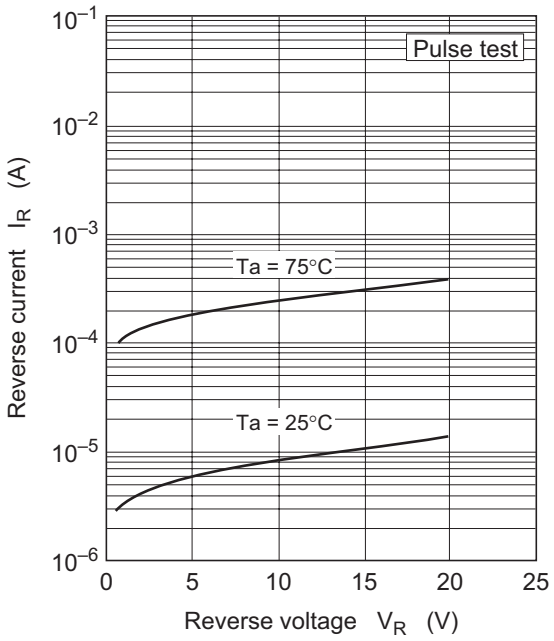


Fig.2 Reverse current vs. Reverse voltage

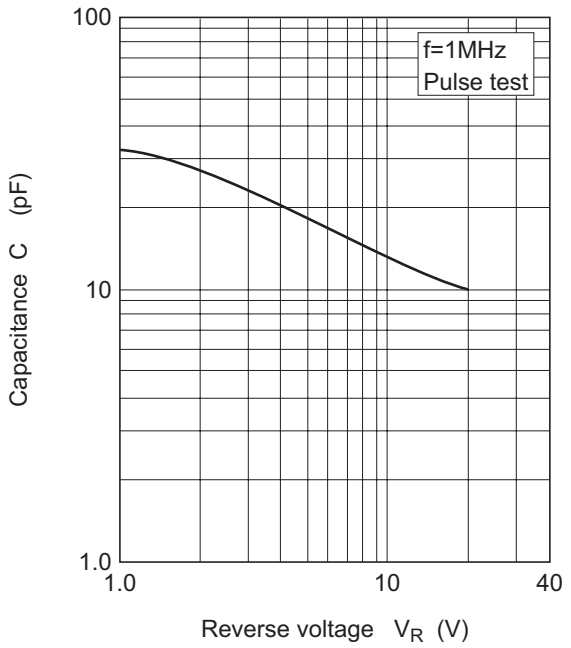


Fig.3 Capacitance vs. Reverse voltage

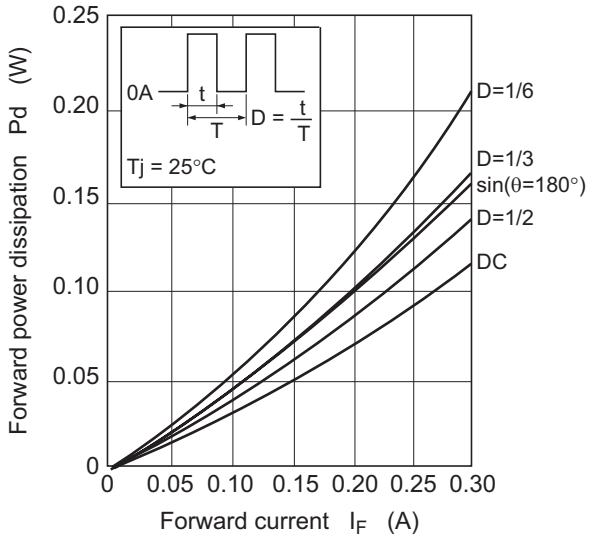


Fig.4 Forward power dissipation vs. Forward current

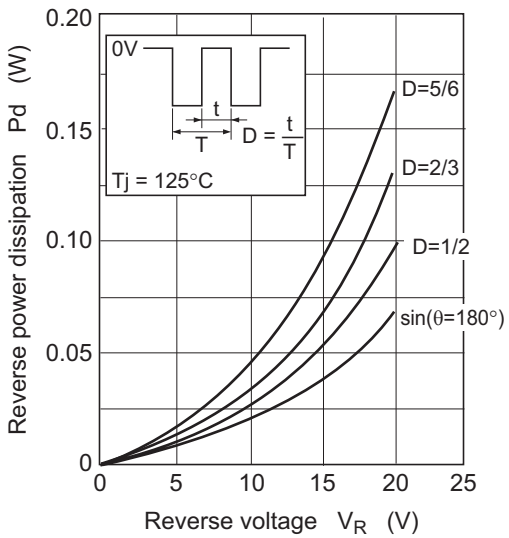


Fig.5 Reverse power dissipation vs. Reverse voltage

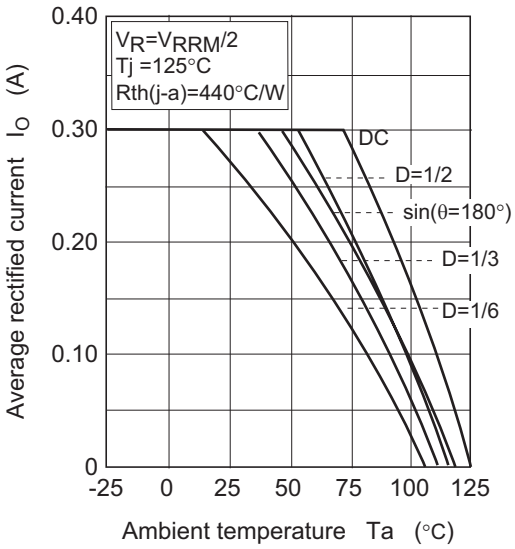
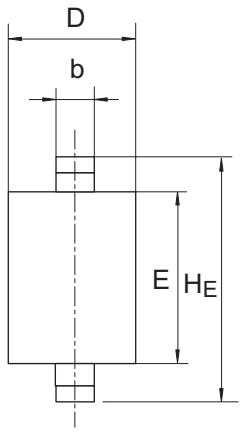
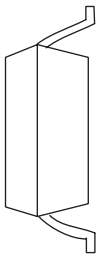


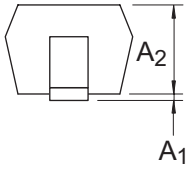
Fig.6 Average rectified current vs. Ambient temperature

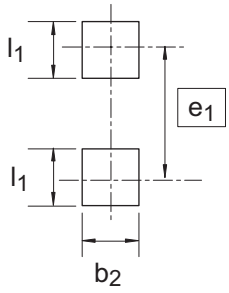
Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
URP	SC-76A	PTSP0002ZA-A	URP / URPV	0.004g









Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A_1	0	-	0.1
A_2	0.75	0.90	1.05
b	0.15	0.30	0.45
D	1.10	1.25	1.40
E	1.55	1.70	1.85
H_E	2.35	2.50	2.65
b_2	-	0.80	-
e_1	-	2.30	-
l_1	-	0.80	-

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