

RKH0160BKJ

R07DS0333EJ0100

Silicon Planar Diode for High Voltage Switching

Rev.1.00

Apr 07, 2011

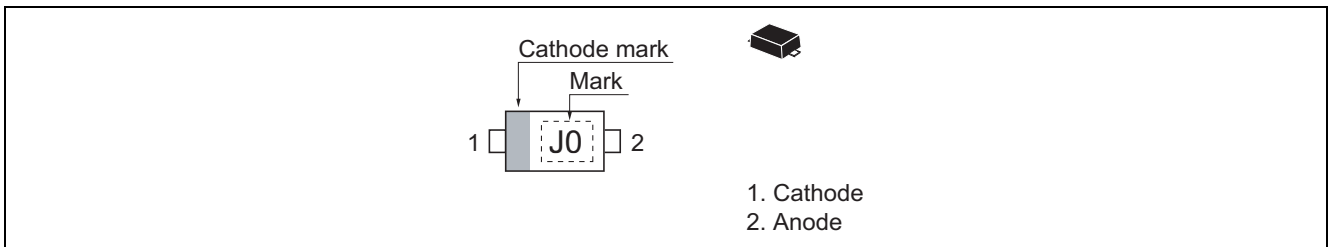
Features

- Short reverse recovery time enable fast switching.
- Ultra small Flat Lead Package (UFP) is suitable for surface mount design.

Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKH0160BKJ R	J0	UFP	PWSF0002ZA-A	R (8,000 pcs / reel)

Pin Arrangement



Absolute Maximum Ratings *1

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	V_{RM}	600	V
Peak forward current	I_{FM}	300	mA
Non-Repetitive peak forward surge current	I_{FSM}^{*1}	1	A
Average rectified current	I_o	100	mA
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

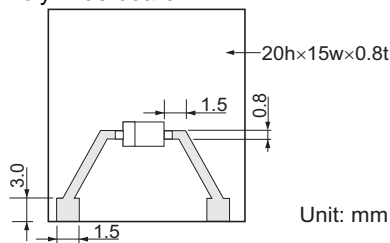
Note: 1. 10 ms Sine Wave 1 pulse

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_R	—	—	10	μA	$V_R = 600 V$
Forward voltage	V_F	—	—	1.8	V	$I_F = 100 mA$
Capacitance	C	—	—	1.5	pF	$V_R = 0 V, f = 1 MHz$
Reverse recovery time	t_{rr}	—	—	70	ns	$I_F = I_R = 30 mA, I_{rr} = 3 mA, R_L = 50 \Omega$
Thermal resistance	$R_{th(j-a)}$	—	650	—	°C/W	Polyimide board *1

Note: 1. Polyimide board



Main Characteristics

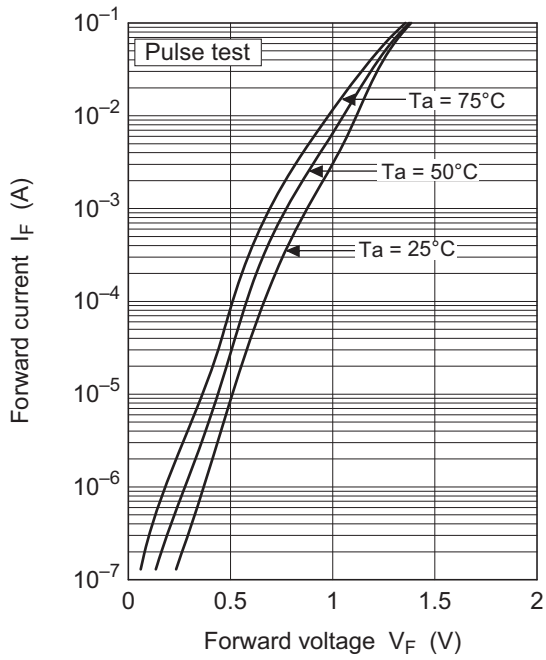


Fig.1 Forward current vs. Forward voltage

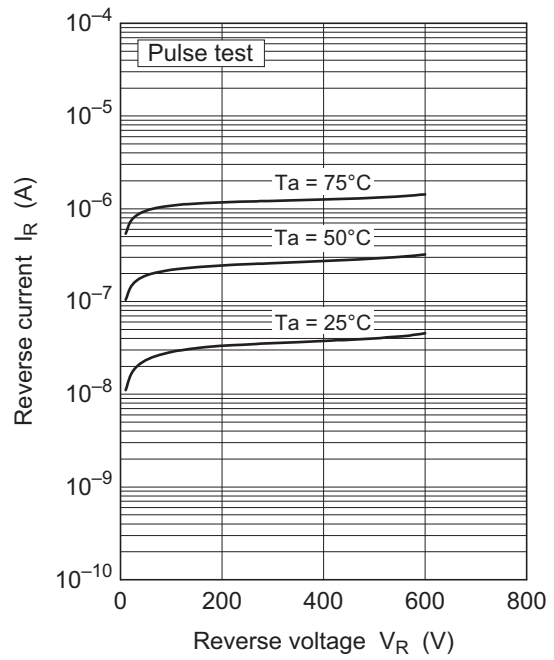


Fig.2 Reverse current vs. Reverse voltage

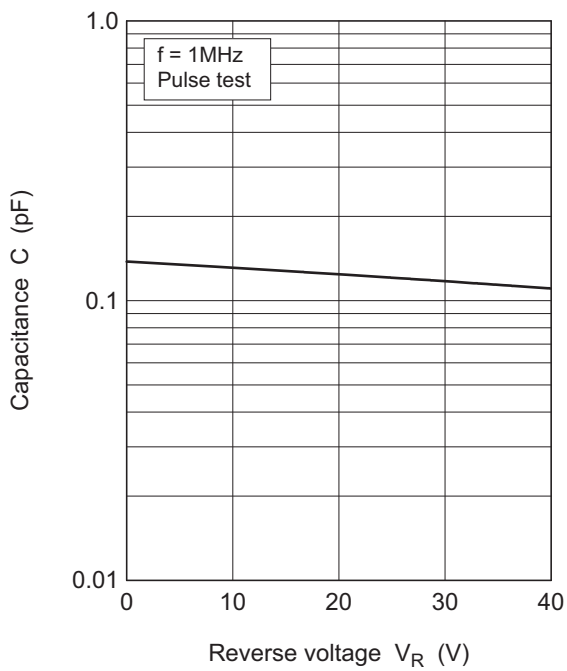


Fig.3 Capacitance vs. Reverse voltage

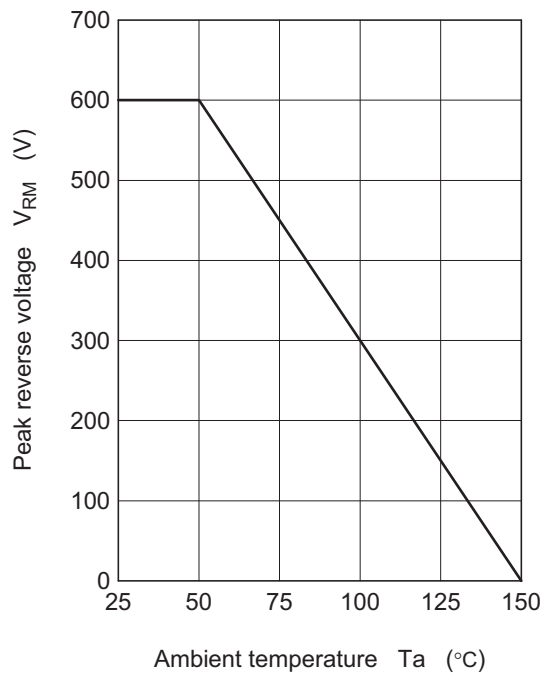
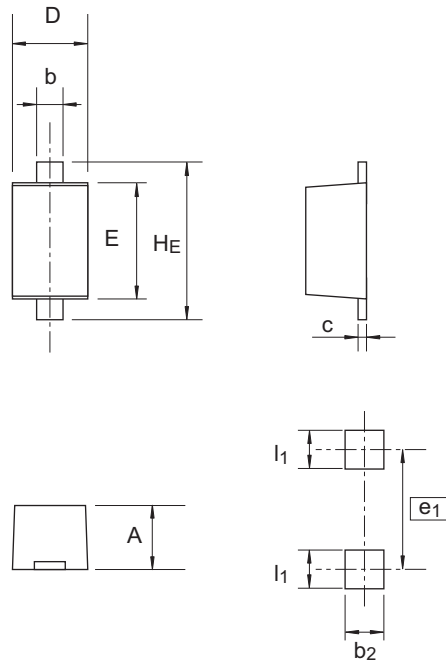


Fig.4 Peak reverse voltage vs. Ambient temperature

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
UFP	SC-79	PWSF0002ZA-A	UFP / UFPV	0.0016g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.50	0.60	0.70
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.70	0.80	0.90
E	1.10	1.20	1.30
HE	1.50	1.60	1.70
b2	—	0.80	—
e1	—	1.70	—
l1	—	0.60	—

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