

RKR0703BKH

Silicon Schottky Barrier Diode for Rectifying

REJ03G1495-0100 Rev.1.00 Jan 09, 2007

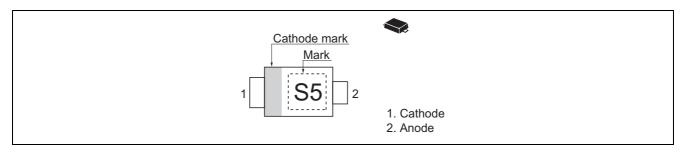
Features

- Low reverse current and suitable for high efficiency rectifying.
- Thin Ultra small Resin Package (TURP) is suitable for high density surface mounting and high speed assembly.

Ordering Information

Type No.	Laser Mark	Package Name	Package Code
RKR0703BKH	S 5	TURP	PUSF0002ZC-A

Pin Arrangement



Absolute Maximum Ratings

 $(Ta = 25^{\circ}C)$

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Reverse voltage	V_R	30	V
Average rectified current	lo *1 *2	0.7	А
Non-Repetitive peak forward surge current	I _{FSM} * ³	3	А
Junction temperature	Tj	150	°C
Storage temperature	Tstg	−55 to +150	°C

Notes: 1. See from Fig.6 with Glass epoxy board.

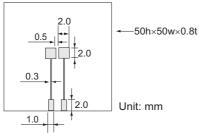
- 2. Ta = 30°C, With Glass epoxy board (board size: 50mm \times 50 mm, Land size 6mm \times 6 mm) Short form wave (θ 180°C), V_R = 15 V.
- 3. 10 ms sine wave 1 pulse.

Electrical Characteristics

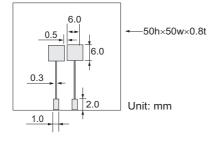
 $(Ta = 25^{\circ}C)$

Item	Symbol	Min	Тур	Max	Unit	Test Condition
Forward voltage	V _{F1}	_	_	0.37	V	I _F = 100 mA
	V _{F2}	_	_	0.55		I _F = 700 mA
Reverse current	I _{R1}	_	_	10	μΑ	V _R = 5 V
	I _{R2}	_	_	50		V _R = 30 V
Capacitance	С		_	20	pF	V _R = 10 V, f = 1 MHz
Thermal resistance	Rth(j-a)	_	100	_	°C/W	Ceramics board *1
		_	200	_		Glass epoxy board *2

Notes: 1. Ceramics board



2. Glass epoxy board



3. TURP is the structure which radiates heat to a substrate, please perform mounting to a substrate by reflow.

Main Characteristics

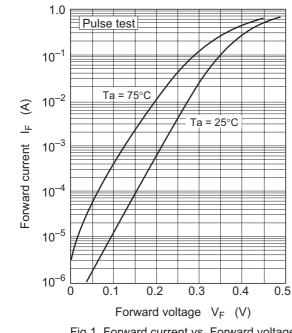


Fig.1 Forward current vs. Forward voltage

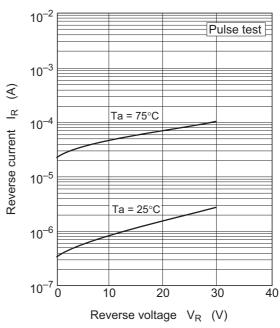


Fig.2 Reverse current vs. Reverse voltage

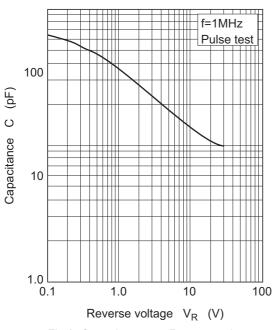
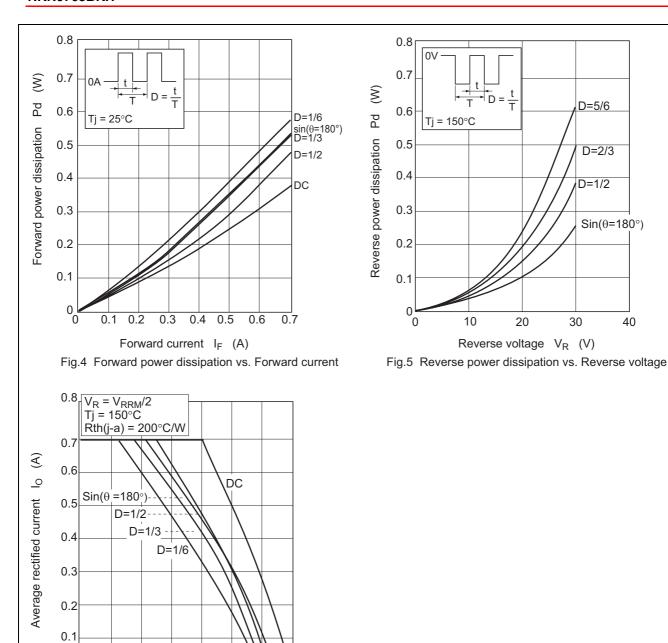


Fig.3 Capacitance vs. Reverse voltage



40

0^L -25

25

0

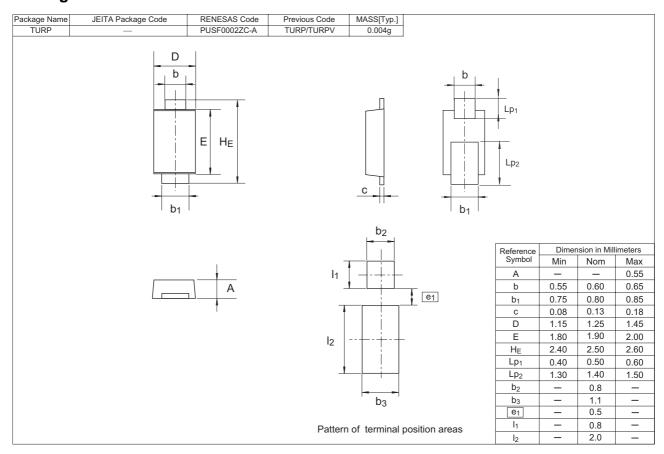
50

75

Ambient temperature Ta (°C) Fig.6 Average rectified current vs. Ambient temperature

100 125 150

Package Dimensions



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