

# RKS100KG

## Silicon Epitaxial Planar Diode for High Speed Switching

REJ03G1698-0100  
 Rev.1.00  
 Jul 03, 2008

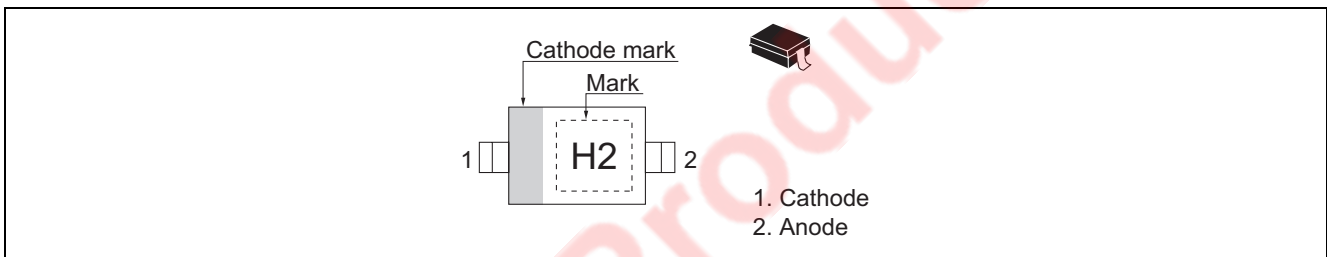
### Features

- Low capacitance. ( $C = 2.0 \text{ pF max}$ )
- Short reverse recovery time. ( $t_{rr} = 3.0 \text{ ns max}$ )
- Ultra small Resin Package (URP) is suitable for high density surface mounting and high speed assembly.

### Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKS100KG	H2	URP	PTSP0002ZA-A

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Peak reverse voltage	$V_{RM}$	85	V
Reverse voltage	$V_R$	80	V
Forward current	$I_F^{*1}$	200	mA
Non-Repetitive peak forward surge current	$I_{FSM}^{*2}$	4	A
Junction temperature	$T_j$	150	°C
Storage temperature	$T_{stg}$	-55 to +150	°C

Notes: 1. Forward current with mounting on the board of Figure 1.

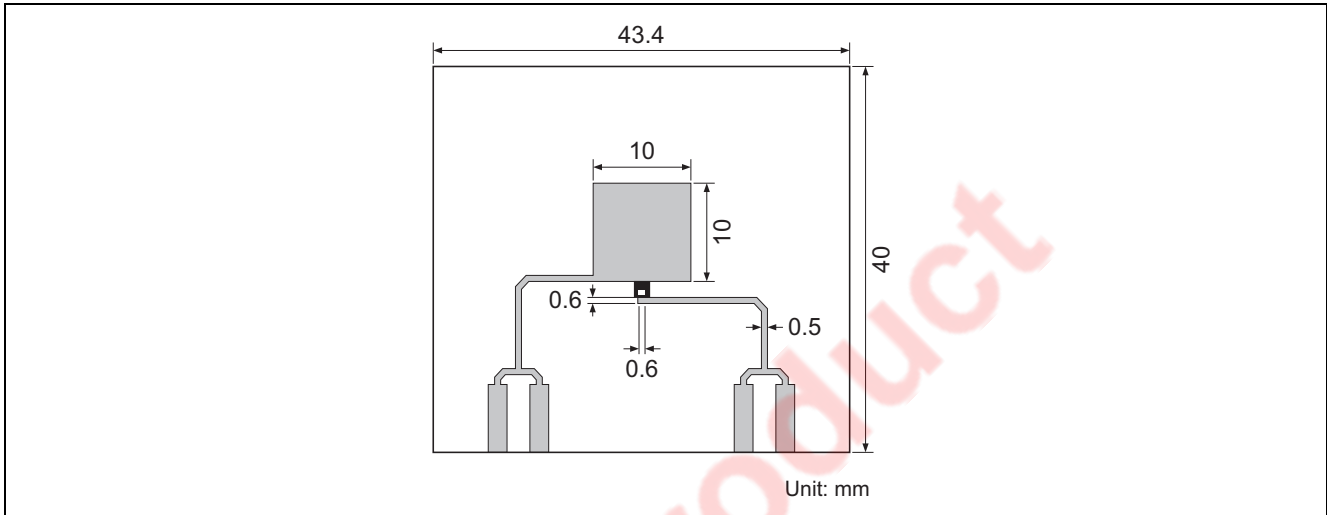
2. Within 1  $\mu$ s forward surge current.

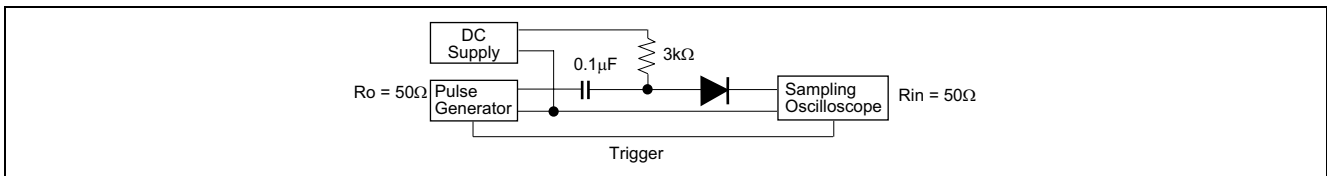
Figure 1 Board

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_{F1}$	—	—	0.8	V	$I_F = 10$ mA
	$V_{F2}$	—	—	1.2		$I_F = 100$ mA
Reverse current	$I_R$	—	—	0.1	$\mu$ A	$V_R = 80$ V
Capacitance	C	—	—	2.0	pF	$V_R = 0$ V, $f = 1$ MHz
Reverse recovery time <sup>*1</sup>	$t_{rr}$	—	—	3.0	ns	$I_F = 10$ mA, $V_R = 6$ V, $R_L = 50$ $\Omega$

Note: 1. Reverse recovery time test circuit



Main Characteristics

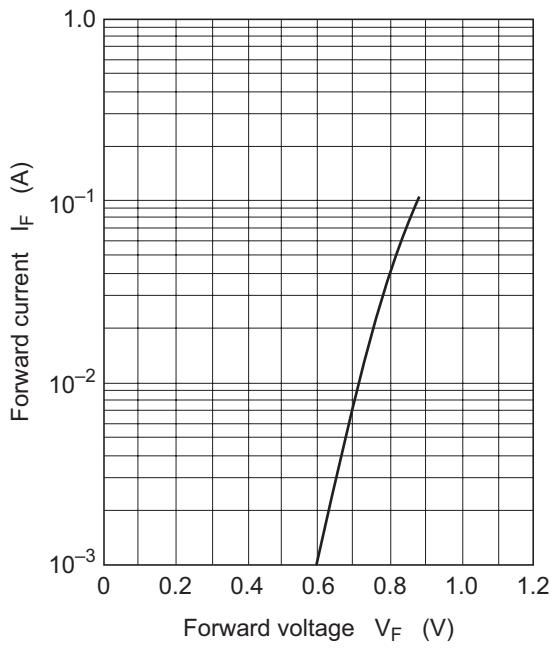


Fig.1 Forward current vs. Forward voltage

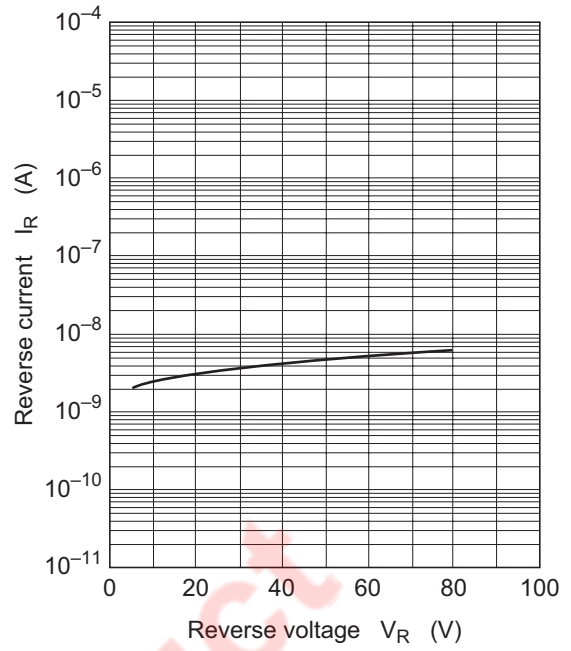


Fig.2 Reverse current vs. Reverse voltage

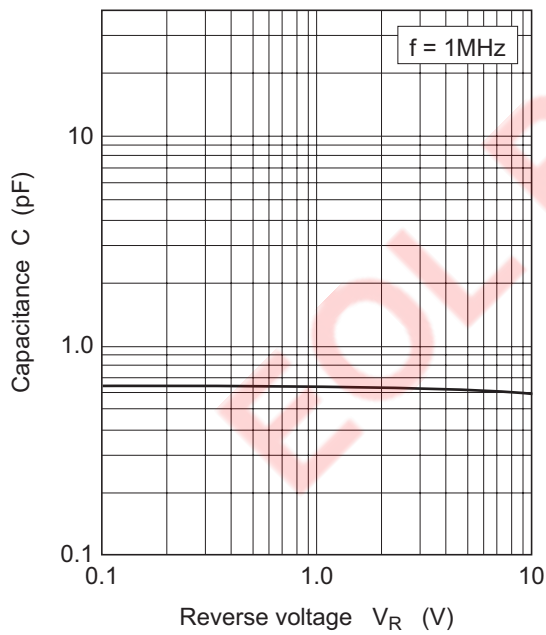
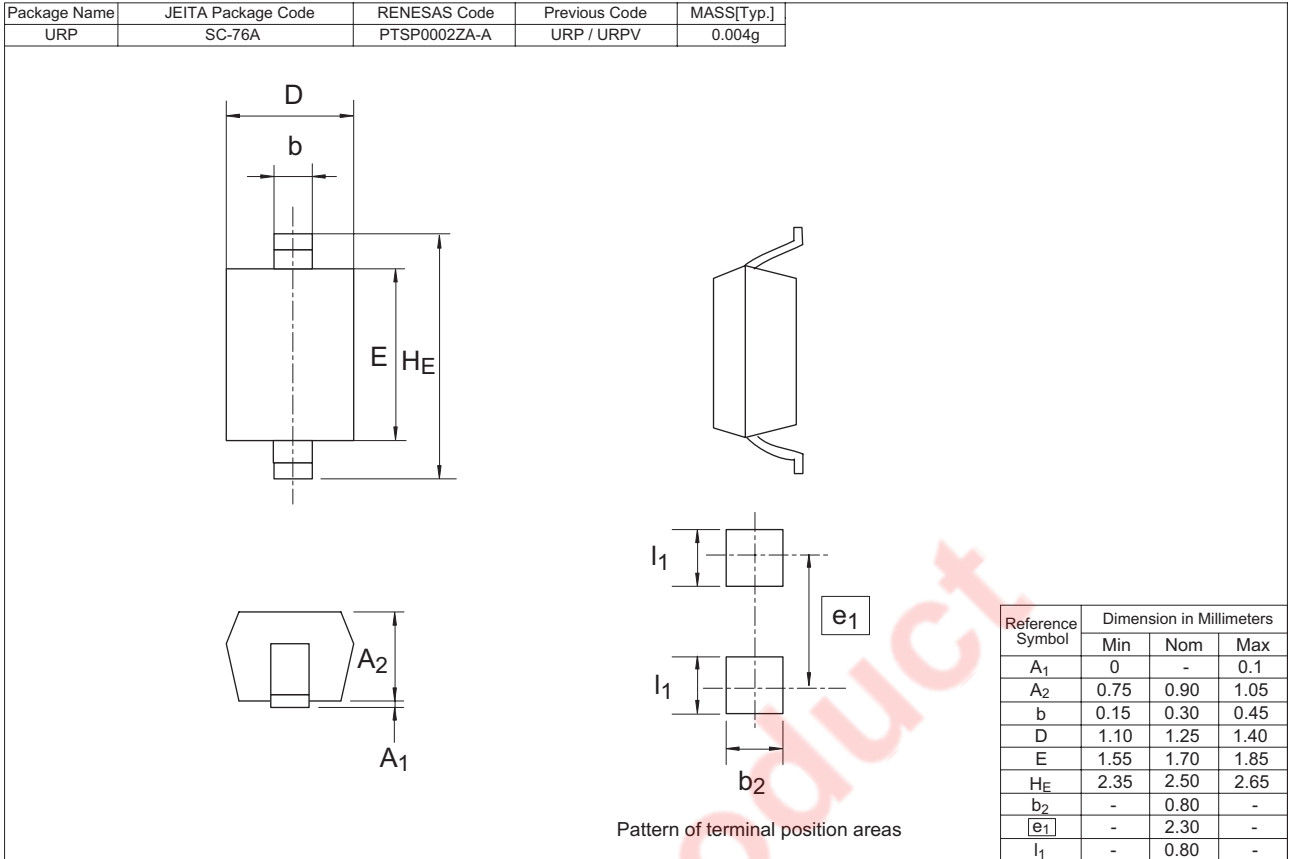


Fig.3 Capacitance vs. Reverse voltage

### Package Dimensions



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