

# RKP301KJ

## Silicon Epitaxial Planar Pin Diode for Antenna Switching

REJ03G1686-0100  
Rev.1.00  
May 30, 2008

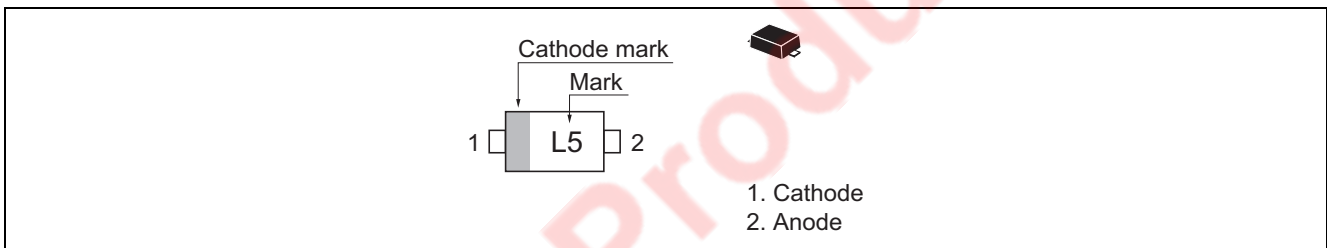
### Features

- Low capacitance. ( $C = 0.30 \text{ pF max}$ )
- Low forward resistance. ( $r_f = 2.5 \Omega \text{ max}$ )
- Ultra small Flat Lead Package (UFP) is suitable for surface mount design.

### Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKP301KJ	L5	UFP	PWSF0002ZA-A

### Pin Arrangement



## Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Ratings	Unit
Reverse voltage	$V_R$	30	V
Forward current	$I_F$	100	mA
Power dissipation	$P_d$	150	mW
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	-55 to +125	°C

## Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	$V_F$	—	—	1.0	V	$I_F = 10 \text{ mA}$
Reverse current	$I_R$	—	—	100	nA	$V_R = 30 \text{ V}$
Capacitance	$C$	—	—	0.30	pF	$V_R = 20 \text{ V}, f = 1 \text{ MHz}$
Forward resistance	$r_f$	—	—	2.5	$\Omega$	$I_F = 10 \text{ mA}, f = 100 \text{ MHz}$

Note: For UFP package, the material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

Main Characteristic

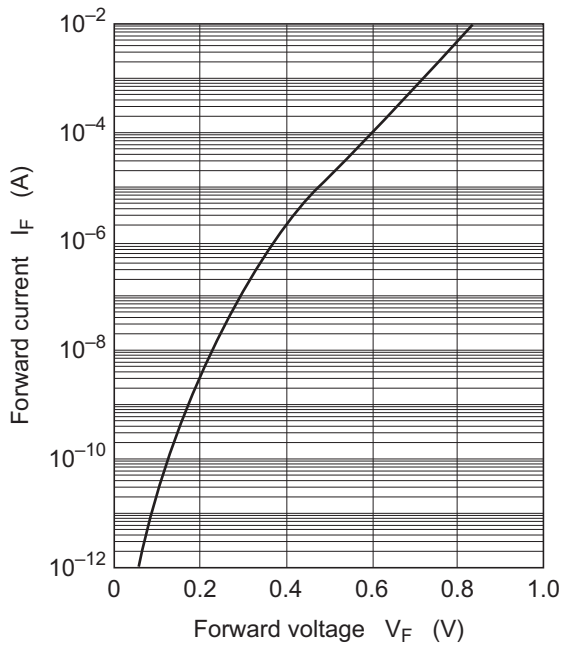


Fig.1 Forward current vs. Forward voltage

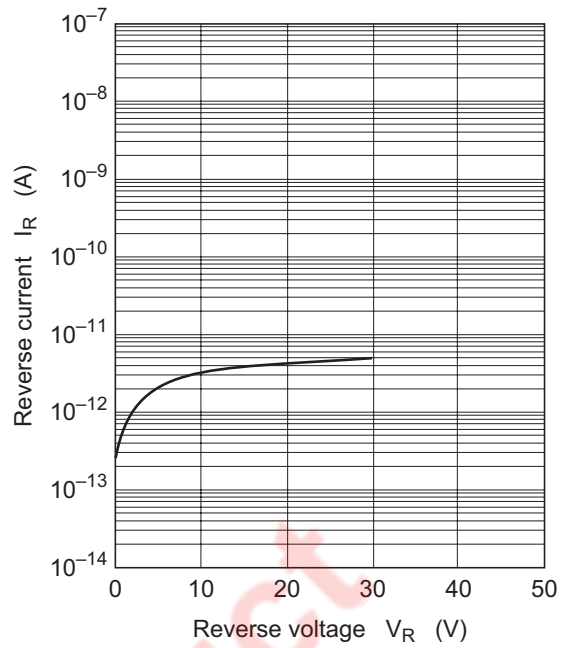


Fig.2 Reverse current vs. Reverse voltage

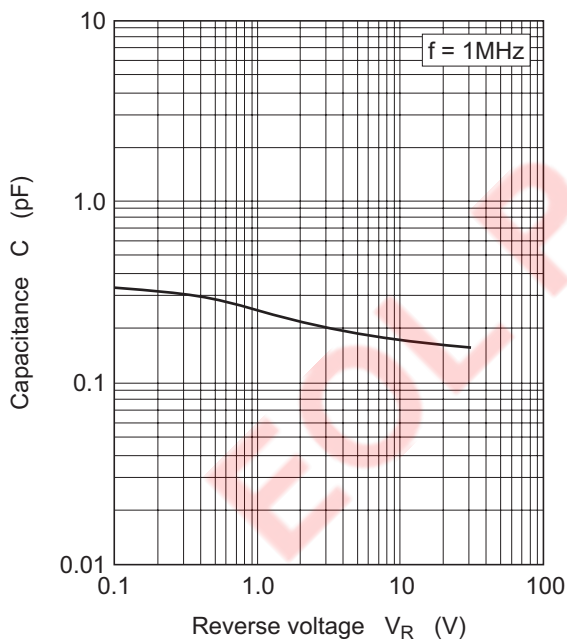


Fig.3 Capacitance vs. Reverse voltage

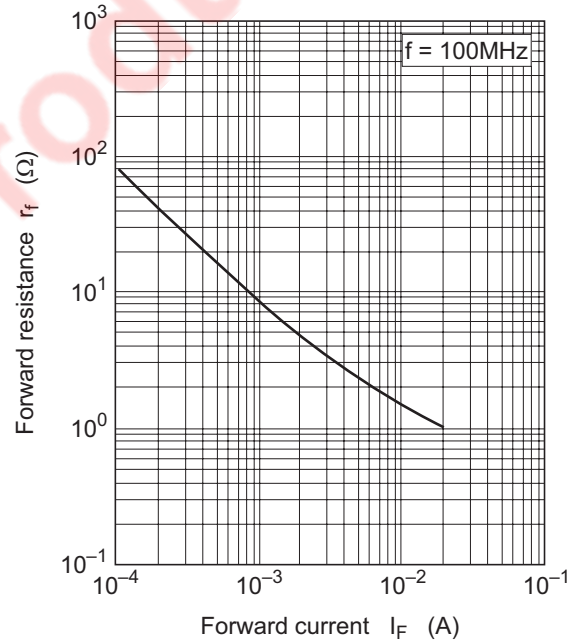
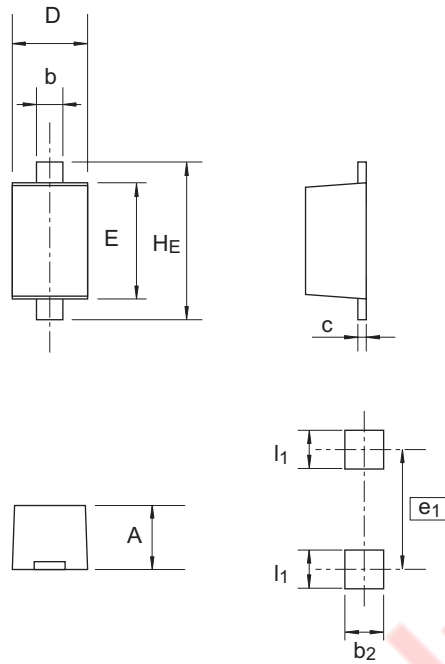


Fig.4 Forward resistance vs. Forward current

### 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	—

EOL Product

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