

RKP301KJ

Silicon Epitaxial Planar Pin Diode for Antenna Switching

REJ03G1686-0100

Rev.1.00

May 30, 2008

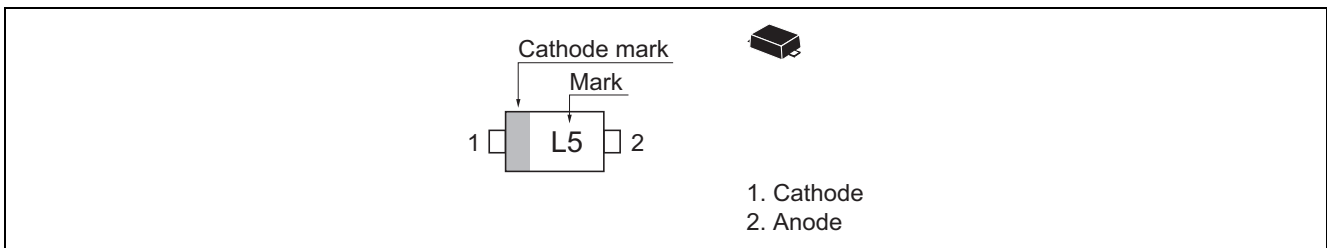
Features

- 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	Ω	$I_F = 10 \text{ mA}, f = 100 \text{ MHz}$

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

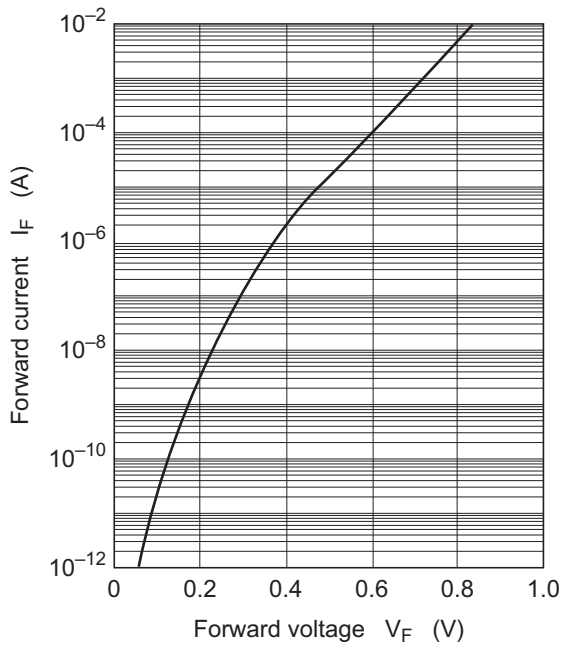


Fig.1 Forward current vs. Forward voltage

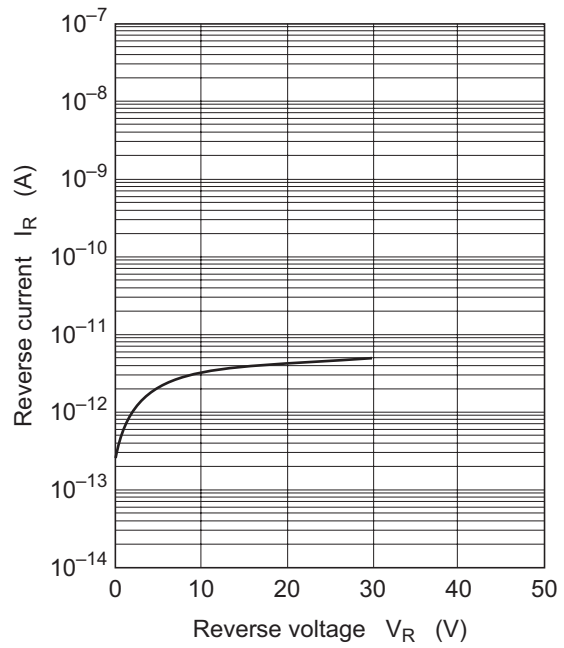


Fig.2 Reverse current vs. Reverse voltage

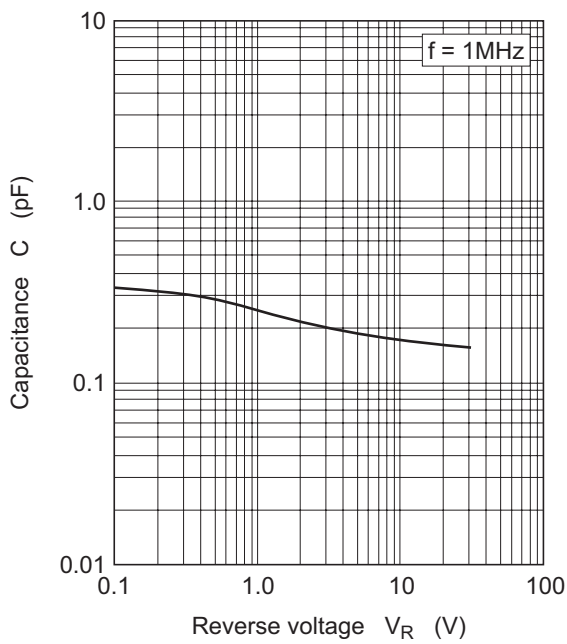


Fig.3 Capacitance vs. Reverse voltage

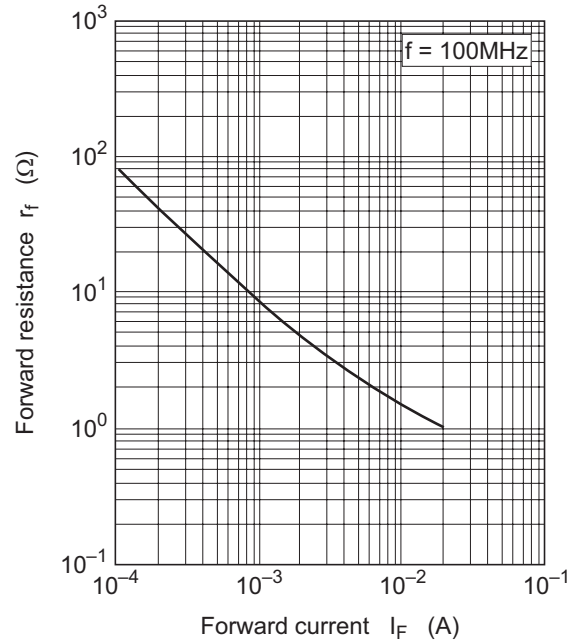
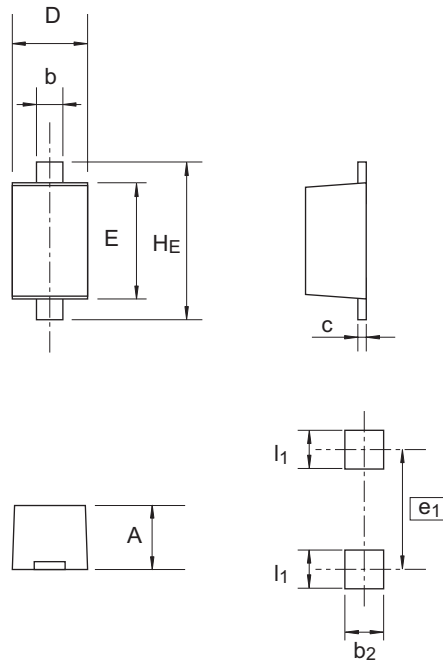


Fig.4 Forward resistance vs. Forward current

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	—

Notes:

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