

RKP200KP

Silicon Epitaxial Planar Pin Diode for Antenna Switching

REJ03G1303-0300

Rev.3.00

Feb 21, 2007

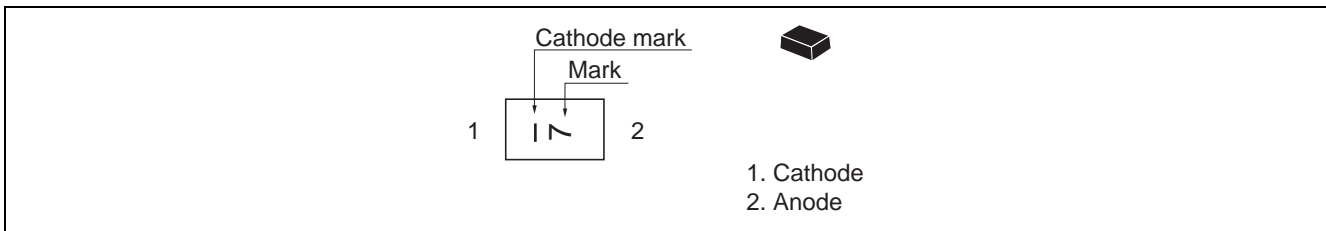
Features

- An optimal solution for antenna switching in mobile phones.
- Low capacitance. ($C = 0.35 \text{ pF max}$)
- Low forward resistance. ($r_f = 1.3 \Omega \text{ max}$)
- Halogen free, Environmental friendly Package include Conformity to RoHS Directive.
- Ultra small Package ($0.6\text{mm} \times 0.3\text{mm}$ Size leadless type)

Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKP200KP	7	MP6	PXSN0002ZB-A

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	30	V
Forward current	I_F	100	mA
Power dissipation	P_d	100	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	—	—	0.35	pF	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$
Forward resistance	r_f	—	—	1.3	Ω	$I_F = 10 \text{ mA}, f = 100 \text{ MHz}$
ESD-Capability *1	—	100	—	—	V	$C = 200 \text{ pF}, R = 0 \Omega$, Both forward and reverse direction 1 pulse.

Notes: 1. Failure criterion ; $I_R > 100 \text{ nA}$ at $V_R = 30 \text{ V}$

2. Please do not use the soldering iron due to avoid high stress to the MP6 package.

Main Characteristic

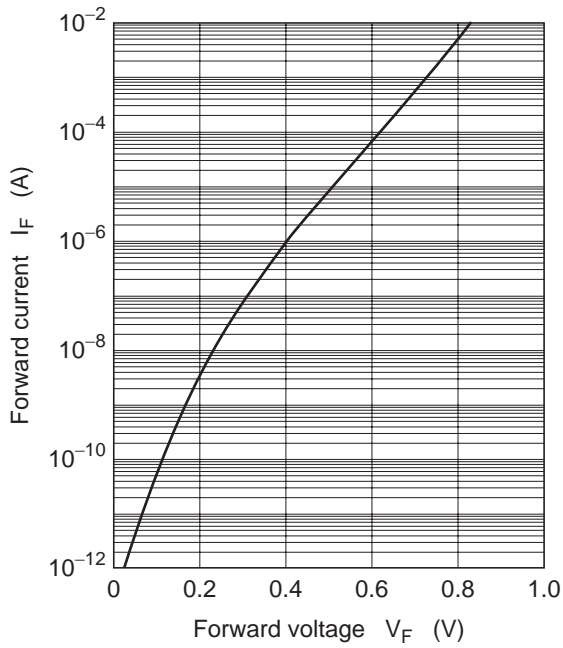


Fig.1 Forward current vs. Forward voltage

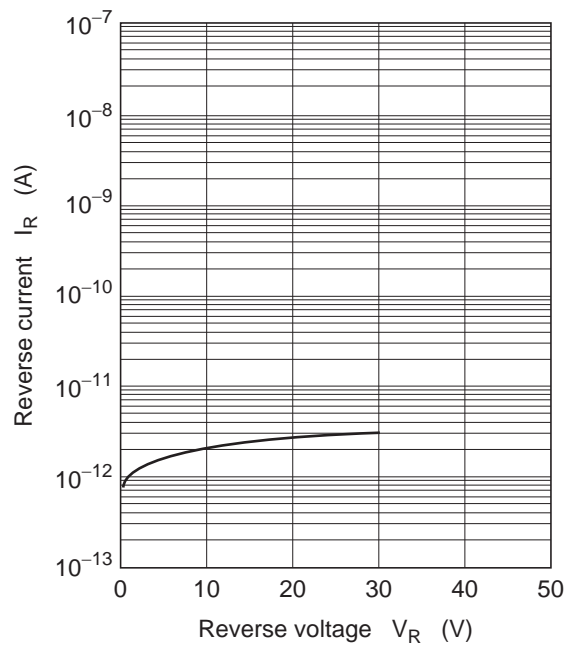


Fig.2 Reverse current vs. Reverse voltage

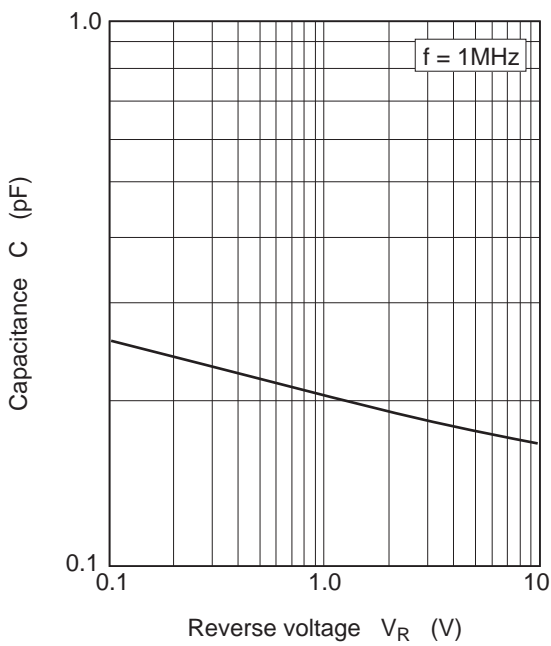


Fig.3 Capacitance vs. Reverse voltage

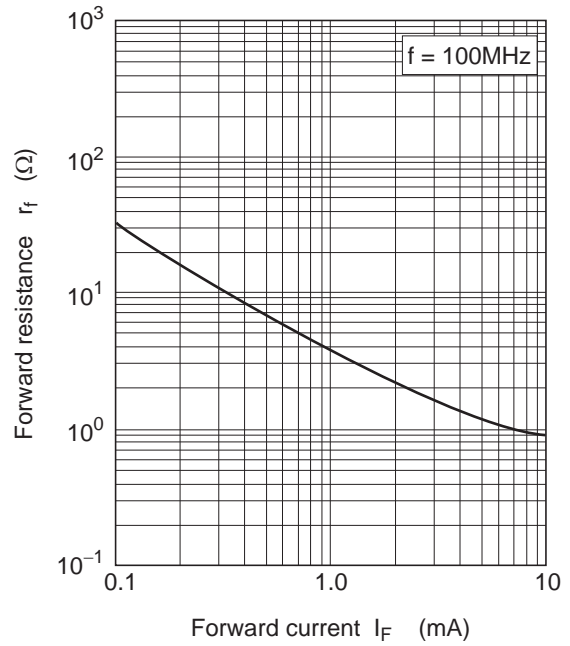
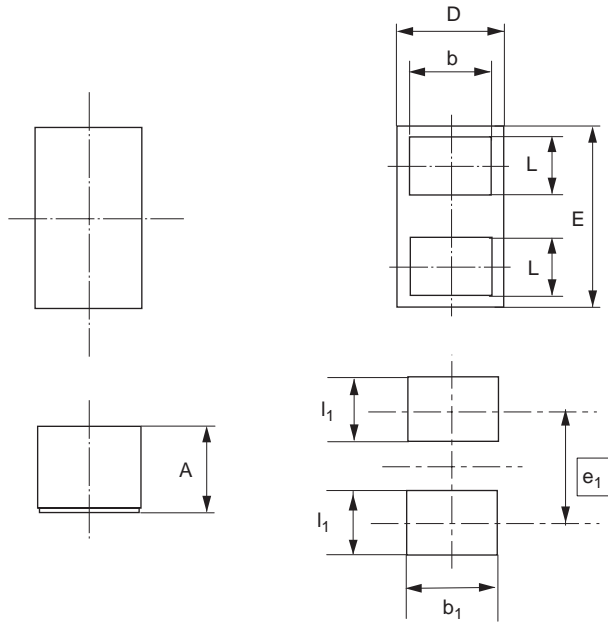


Fig.4 Forward resistance vs. Forward current

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
MP6	—	PXSN0002ZB-A	MP6V	0.00015g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.27	0.30	0.33
b	0.25	0.27	0.29
D	0.29	0.32	0.35
E	0.59	0.62	0.65
L	0.17	0.19	0.21
b ₁	—	0.31	—
e ₁	—	0.38	—
l ₁	—	0.23	—

Notes:

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