

RKV600KP

Variable Capacitance Diode for VCO

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Rev.2.00
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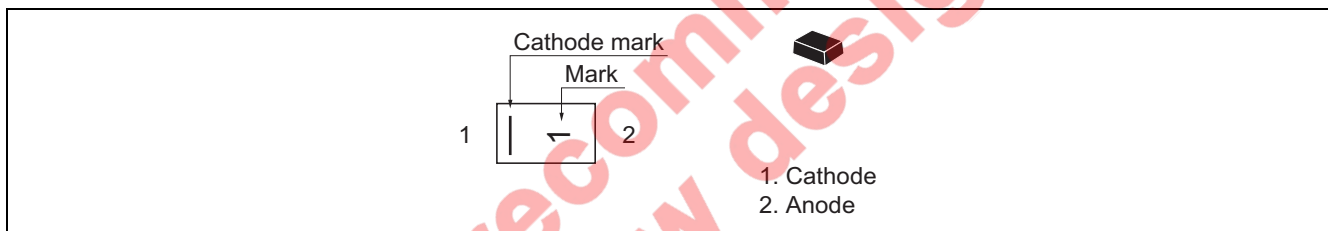
Features

- High capacitance ratio. ($n = 2.35$ min)
- Low series resistance. ($r_s = 0.60 \Omega$ max)
- Halogen free, Environmental friendly Package include Conformity to RoHS Directive.
- Ultra small Package (0.6mm×0.3mm Size leadless type)

Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKV600KP	1	MP6	PXSN0002ZB-A

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V _R	15	V
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
Reverse current	I _{R1}	—	—	10	nA	V _R = 15 V
	I _{R2}	—	—	100		V _R = 15 V, Ta = 60°C
Capacitance	C ₁	6.62	—	7.02	pF	V _R = 1 V, f = 1 MHz
	C ₄	2.60	—	2.95		V _R = 4 V, f = 1 MHz
Capacitance ratio	n	2.35	—	2.55	—	C ₁ / C ₄
Series resistance	r _s	—	—	0.60	Ω	V _R = 1 V, f = 470 MHz

Note: 1. Please do not use the soldering iron due to avoid high stress to the MP6 package.

Not recommended
for new design

Main Characteristic

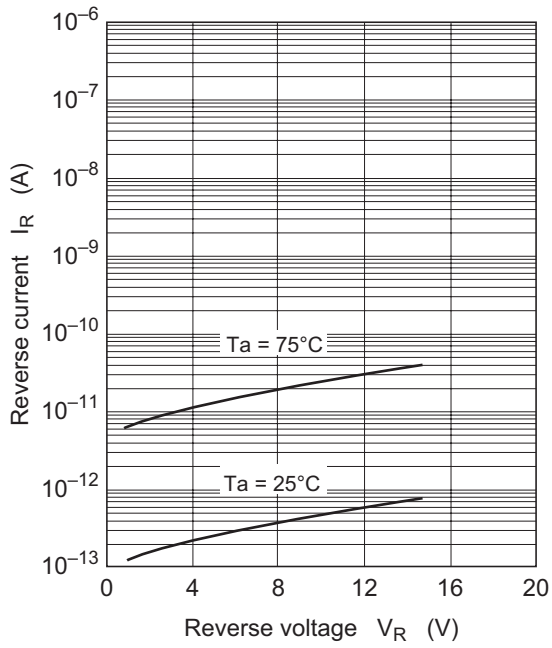


Fig.1 Reverse current vs. Reverse voltage

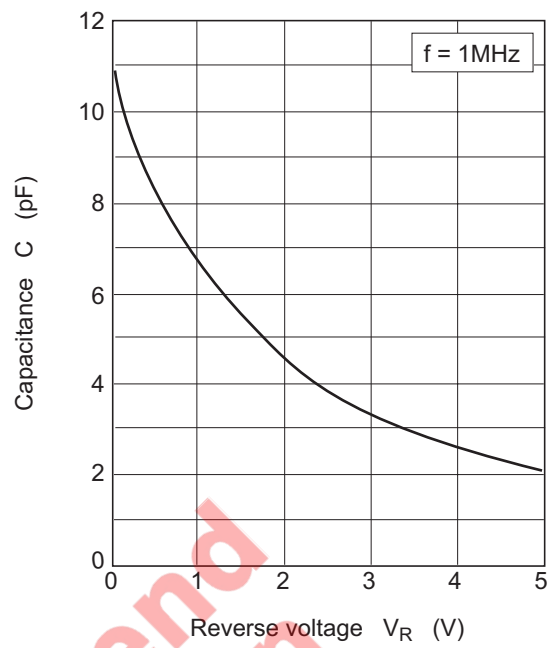


Fig.2 Capacitance vs. Reverse voltage

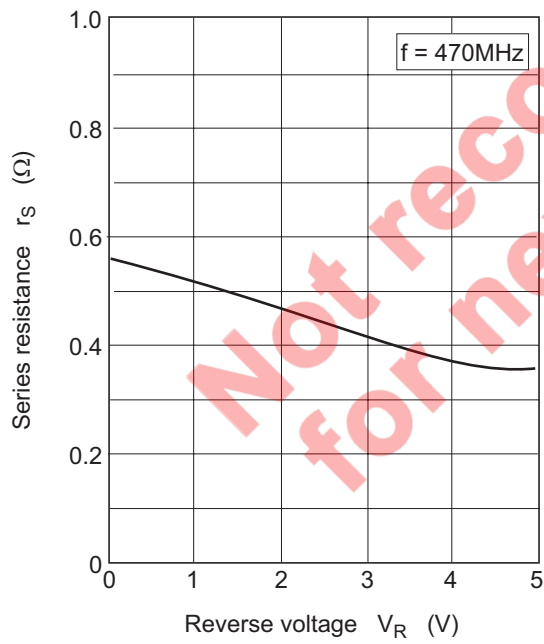
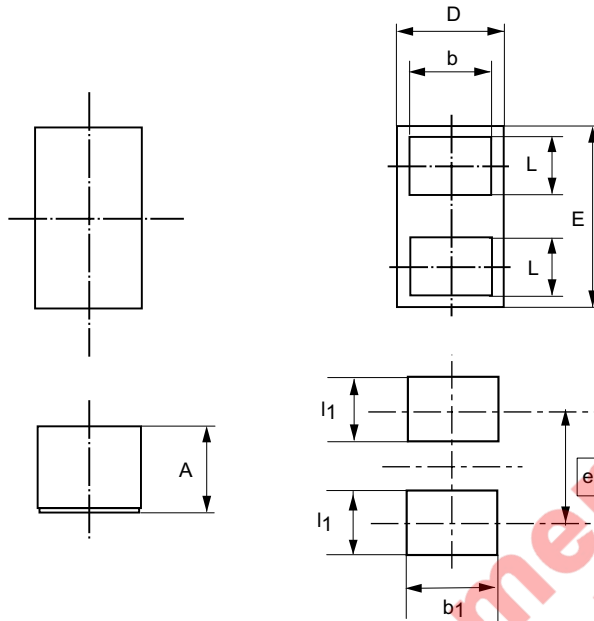


Fig.3 Series resistance vs. Reverse voltage

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	—

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April 1st, 2010
Renesas Electronics Corporation

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