RKV604KP

Variable Capacitance Diode for VCO

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Rev.2.00
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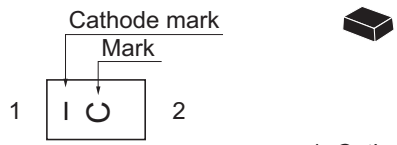
Features

- High capacitance ratio. (n = 1.73 to 2.10)
- Low series resistance. (rs = 0.70 Ω 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
RKV604KP	C	MP6	PXSN0002ZB-A

Pin Arrangement



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	15	V
Junction temperature	Tj	125	°C
Storage temperature	Tstg	−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}	—	—	50		V_R = 15 V, Ta = 60°C
Capacitance	C_1	2.35	—	2.70	pF	V_R = 1 V, f = 1 MHz
	C_3	1.22	—	1.42		V_R = 3 V, f = 1 MHz
Capacitance ratio	n	1.73	—	2.10	—	C_1/C_3
Series resistance	r_S	—	—	0.70	Ω	V_R = 1 V, f = 470 MHz

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

Main Characteristic

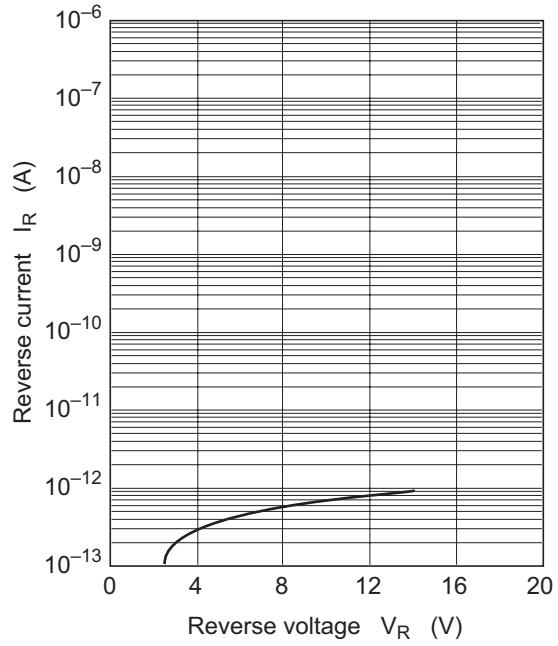


Fig.1 Reverse current vs. Reverse voltage

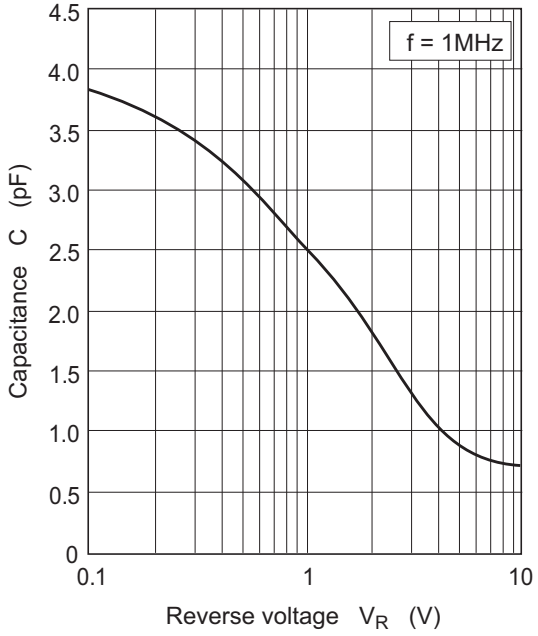


Fig.2 Capacitance vs. Reverse voltage

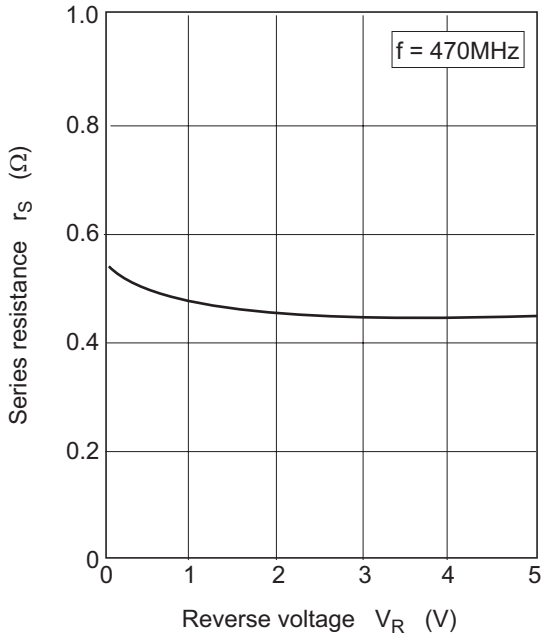
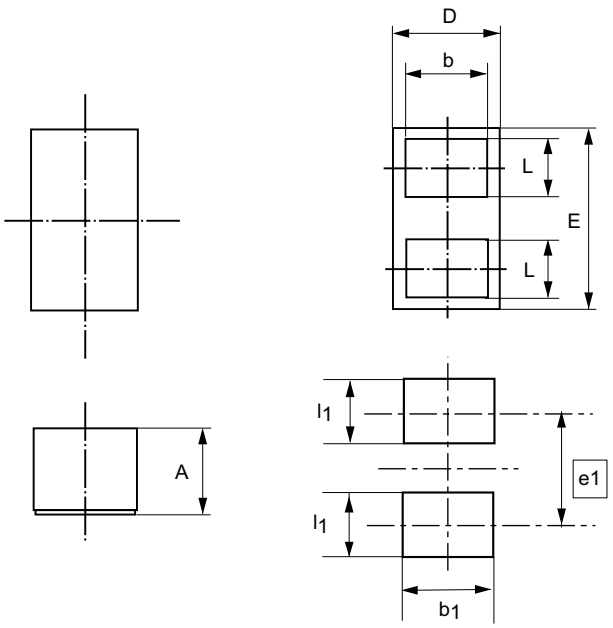


Fig.3 Series resistance vs. Reverse voltage

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
b1	—	0.31	—
e1	—	0.38	—
l_1	—	0.23	—

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