RKP452KE

Ultra small Package Composite Pin Diode for Antenna Switching

REJ03G1695-0100
Rev.1.00
Jun 05, 2008

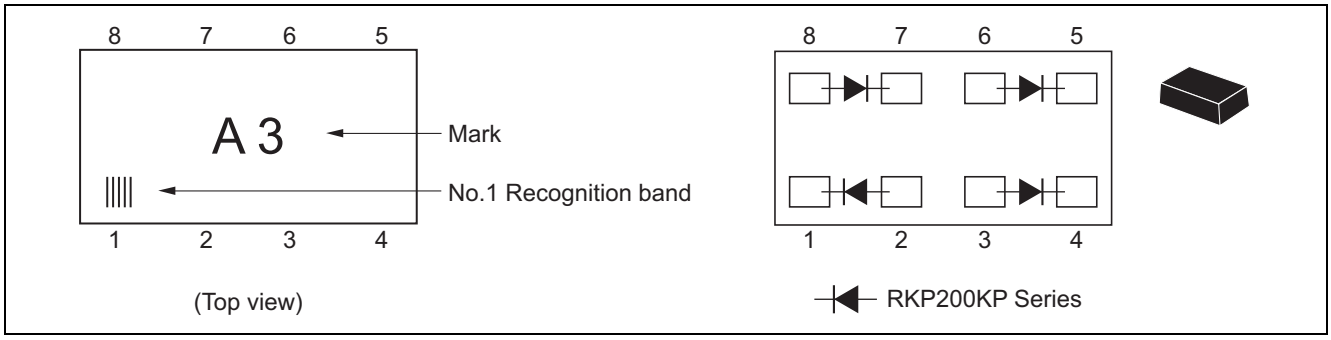
Features

- An optimal solution for antenna switching in mobile phones.
- Low capacitance. (C = 0.35 pF max)
- Low forward resistance. (rf = 1.3 Ω max)
- Halogen free, Environmental friendly Package include Conformity to RoHS Directive.
- Ultra small Package (1.63 mm × 0.67 mm Size leadless type) of diode array with four same kind of elements.

Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKP452KE	A3	MP6-8	PXSN0008ZA-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	Pd *[1]	100	mW
Power dissipation	Pd *[2]	200	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Notes: 1. Per one device.
2. Value at Package total.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_F	—	—	1.0	V	I_F = 10 mA
Reverse current	I_R	—	—	100	nA	V_R = 30 V
Capacitance	C	—	—	0.35	pF	V_R = 1 V, f = 1 MHz
Forward resistance	r_f	—	—	1.3	Ω	I_F = 10 mA, f = 100 MHz
ESD-Capability *[1]	—	100	—	—	V	C = 200 pF, R = 0 Ω, Both forward and reverse direction 1 pulse.

Notes: 1. Failure criterion ; I_R > 100 nA at V_R = 30 V
2. Please do not use the soldering iron due to avoid high stress to the MP6-8 package.

Main Characteristic

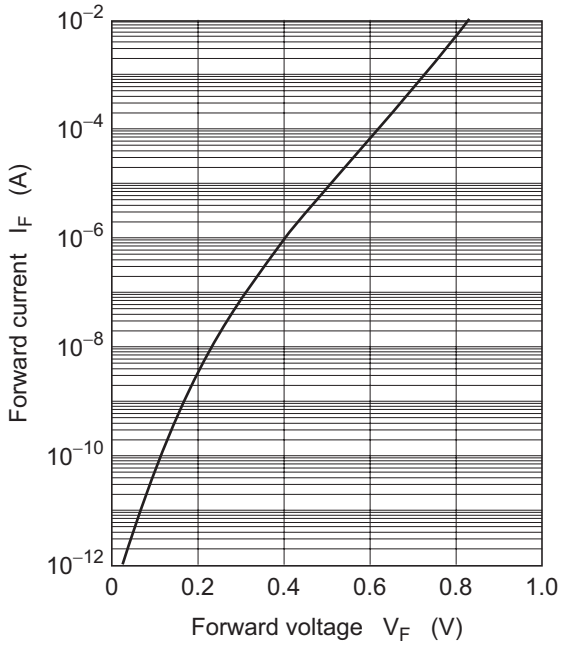


Fig.1 Forward current vs. Forward voltage

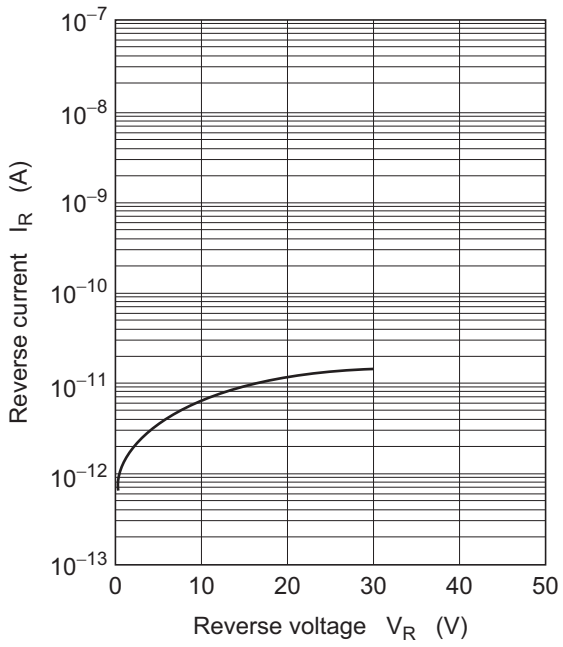


Fig.2 Reverse current vs. Reverse voltage

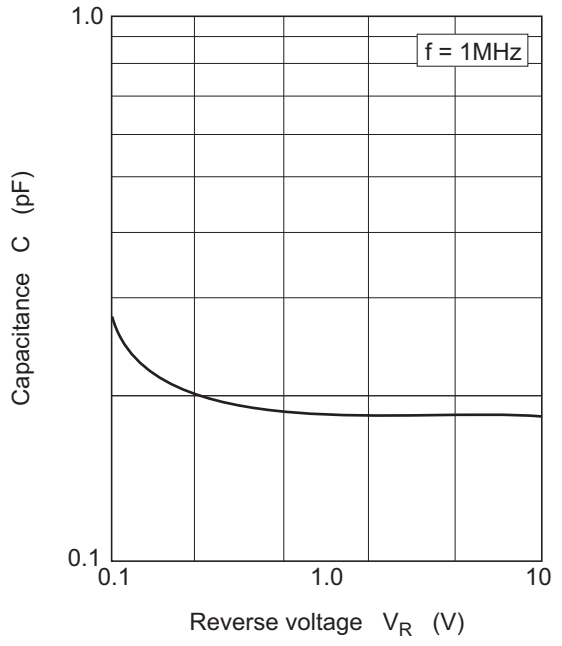


Fig.3 Capacitance vs. Reverse voltage

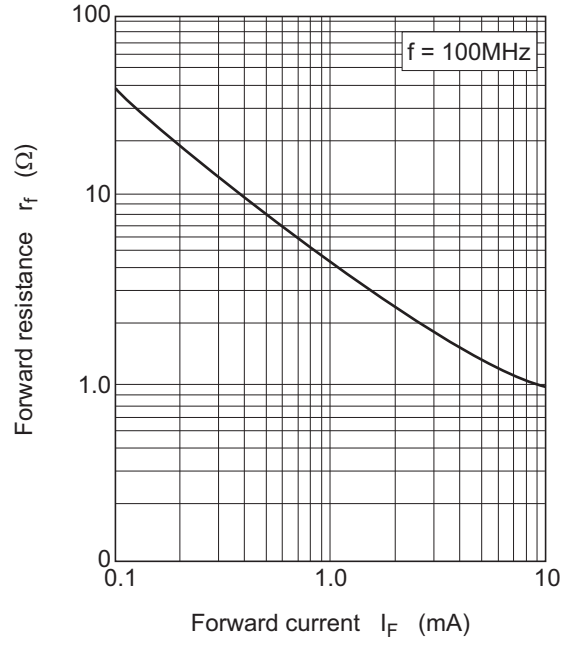
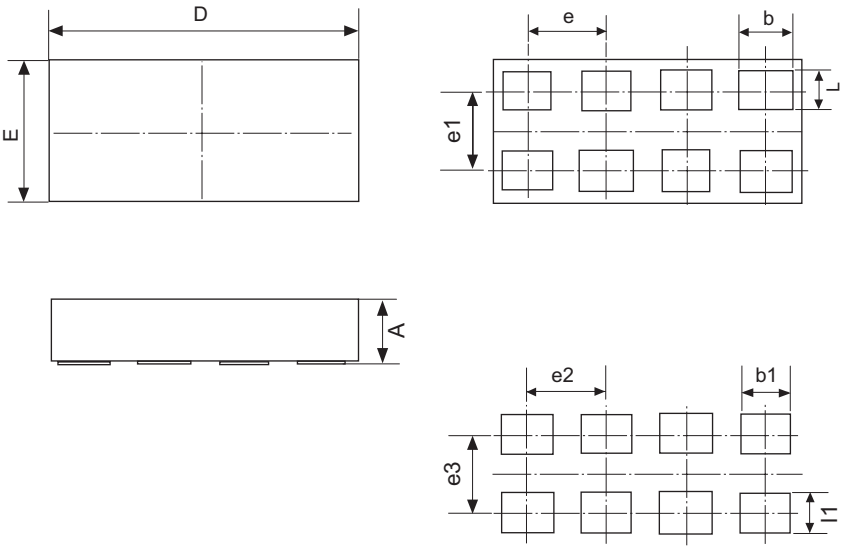


Fig.4 Forward resistance vs. Forward current

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
MP6-8	—	PXSN0008ZA-A	MP6-8V	0.0008 g



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	1.60	1.63	1.66
E	0.64	0.67	0.70
e	–	0.42	–
e1	–	0.38	–
L	0.17	0.19	0.21
b1	–	0.27	–
e2	–	0.42	–
e3	–	0.38	–
l_1	–	0.19	–

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Refer to "**http://www.renesas.com/en/network**" for the latest and detailed information.

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