

RKP452KE

Ultra small Package Composite Pin Diode for Antenna Switching

REJ03G1695-0100

Rev.1.00

Jun 05, 2008

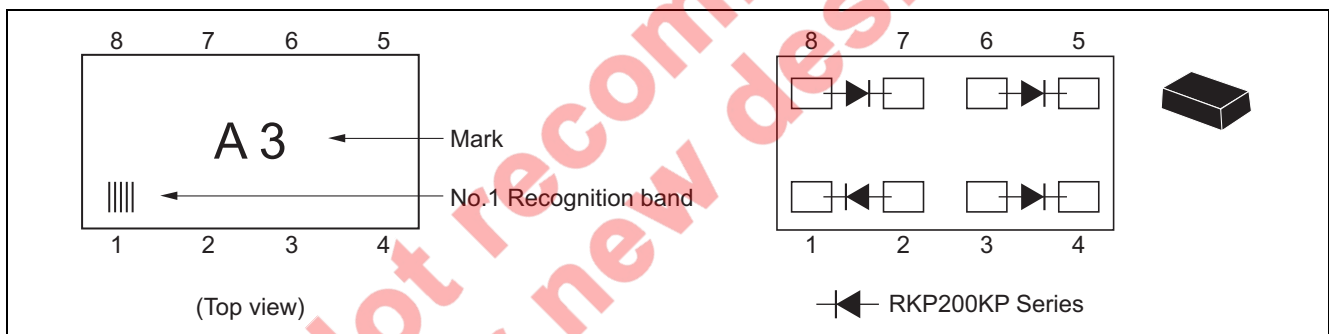
Features

- An optimal solution for antenna switching in mobile phones.
- Low capacitance. ($C = 0.35 \text{ pF max}$)
- Low forward resistance. ($r_f = 1.3 \Omega \text{ max}$)
- Halogen free, Environmental friendly Package include Conformity to RoHS Directive.
- Ultra small Package ($1.63 \text{ mm} \times 0.67 \text{ mm}$ 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	P_d^{*1}	100	mW
Power dissipation	P_d^{*2}	200	mW
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-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	$I_F = 10 \text{ mA}$
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 pF, R = 0 Ω , 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 MP6-8 package.

Not recommended
for new designs

Main Characteristic

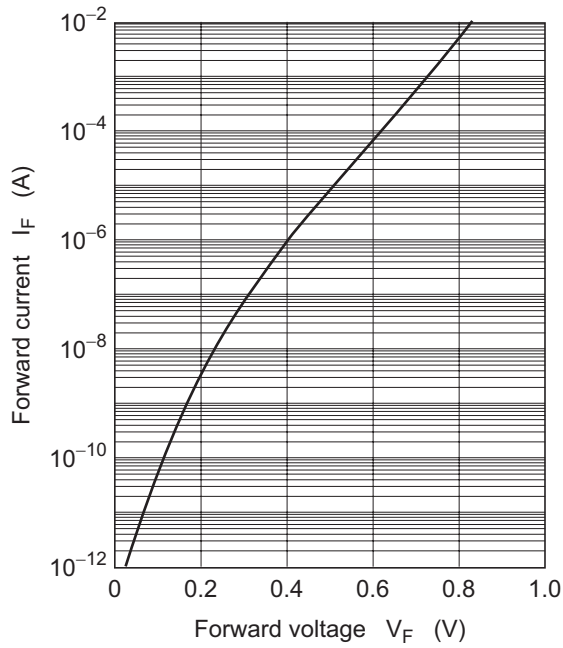


Fig.1 Forward current vs. Forward voltage

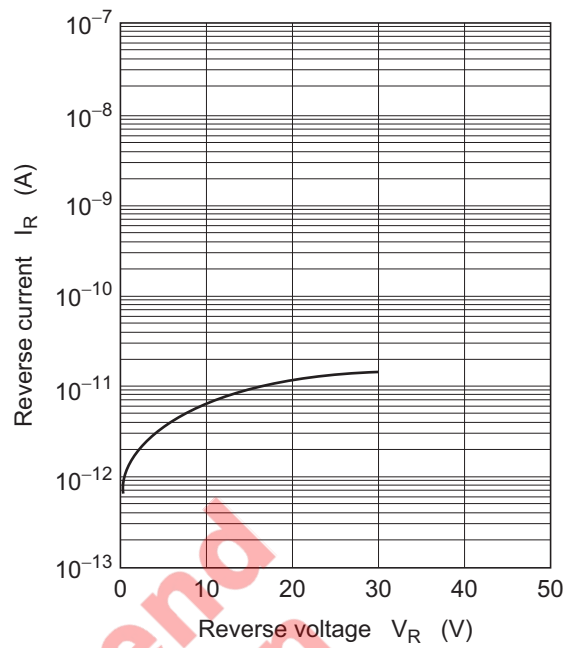


Fig.2 Reverse current vs. Reverse voltage

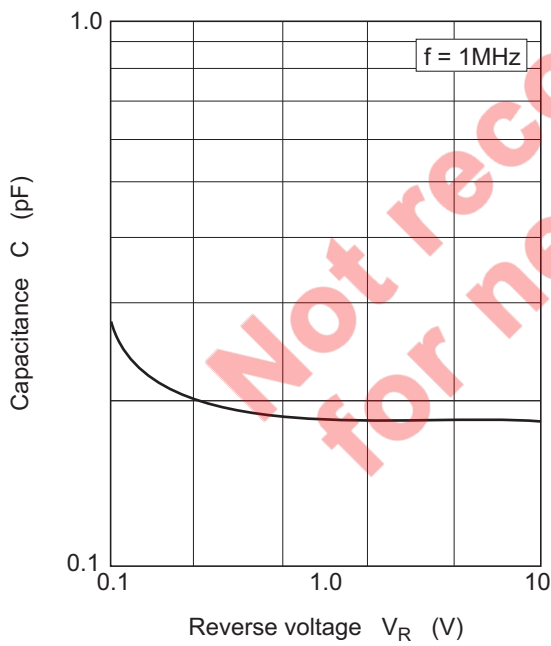


Fig.3 Capacitance vs. Reverse voltage

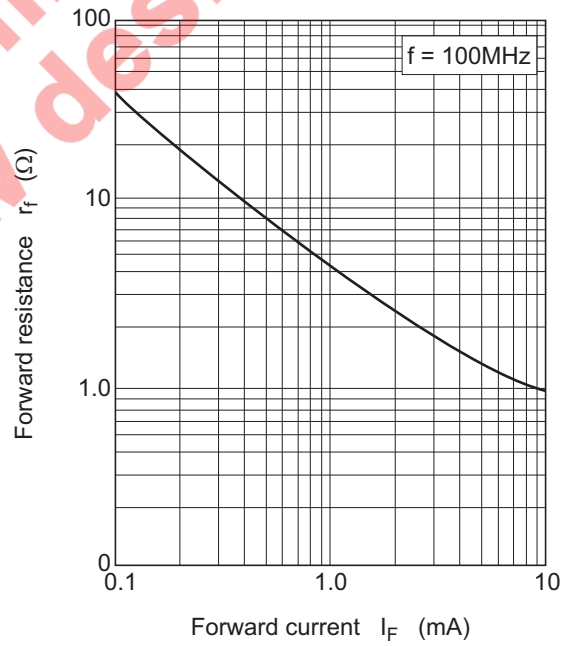
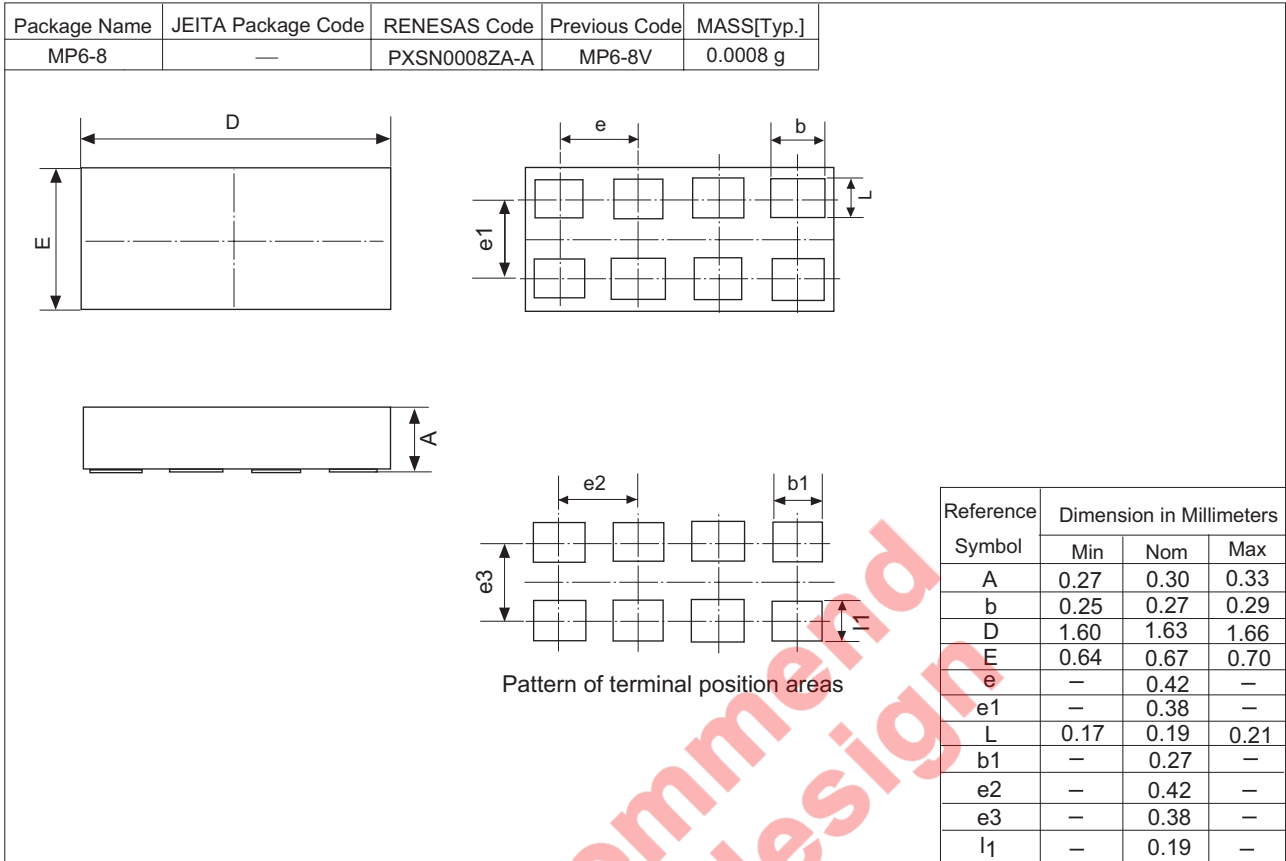


Fig.4 Forward resistance vs. Forward current

Package Dimensions



Not recommended for new design

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