

RKP415KS

Composite Pin Diode for Antenna Switching

REJ03G1737-0100
 Rev.1.00
 Nov 27, 2008

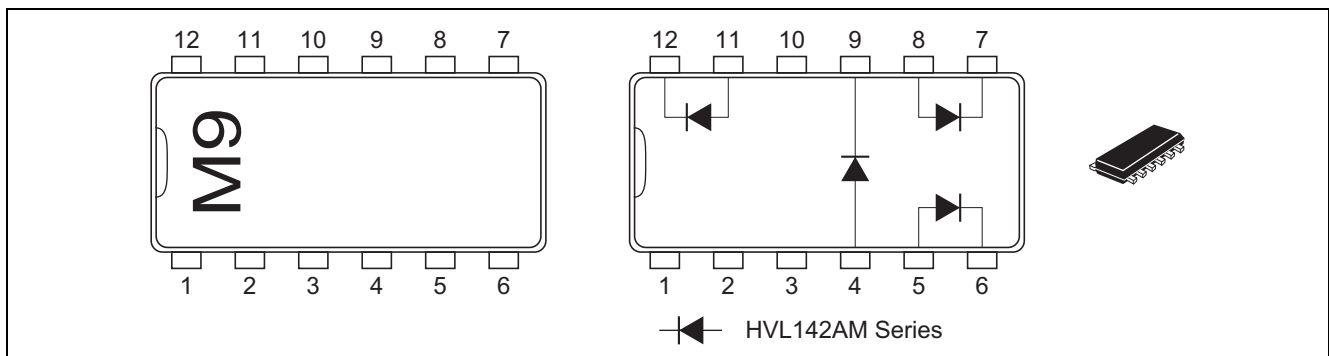
Features

- An optimal solution for antenna switching in mobile phones.
- Low capacitance. ($C = 0.35 \text{ pF max}$)
- Low forward resistance. ($r_f = 1.3 \Omega \text{ max}$)
- Thin outline of diode array with four same kind of elements (MFP12) is suitable for compact and high-density surface mount design.

Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKP415KS	M9	MFP12	PUSF0012ZA-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

Note: Per one device

Electrical Characteristics (HVL142AM Series)

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse current	I_R	—	—	100	nA	$V_R = 30$ V
Forward voltage	V_F	—	—	1.0	V	$I_F = 10$ mA
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. In the MFP12 package, some lead is exposed because the tip of the lead is used as the cutting plane. Therefore, the solderability of the lead tip has been ignored. Please test and confirm before use.

Main Characteristics (HVL142AM Series)

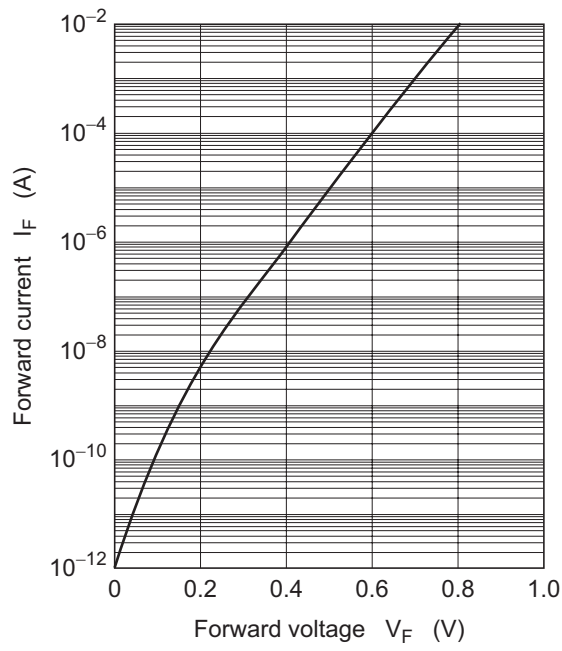


Fig.1 Forward current vs. Forward voltage

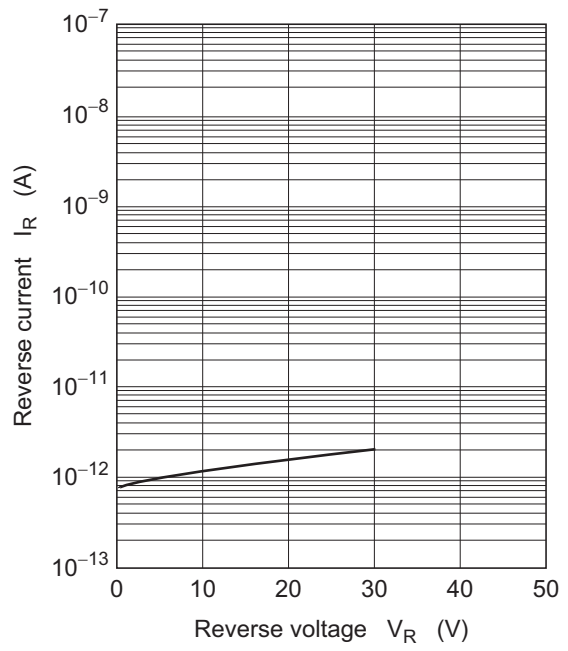


Fig.2 Reverse current vs. Reverse voltage

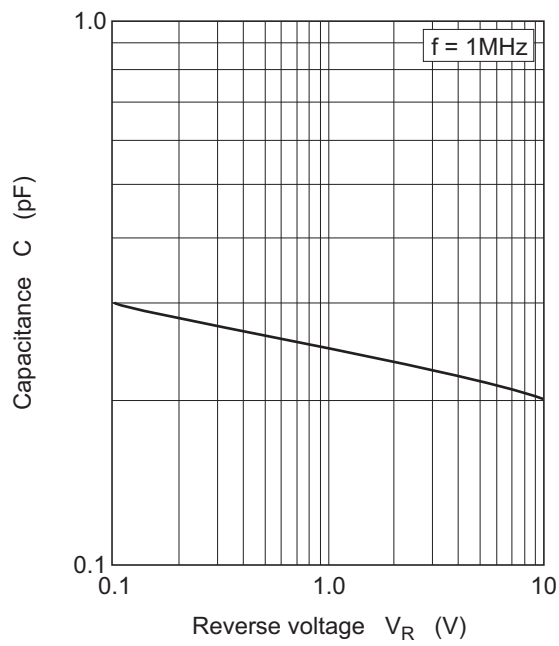


Fig.3 Capacitance vs. Reverse voltage

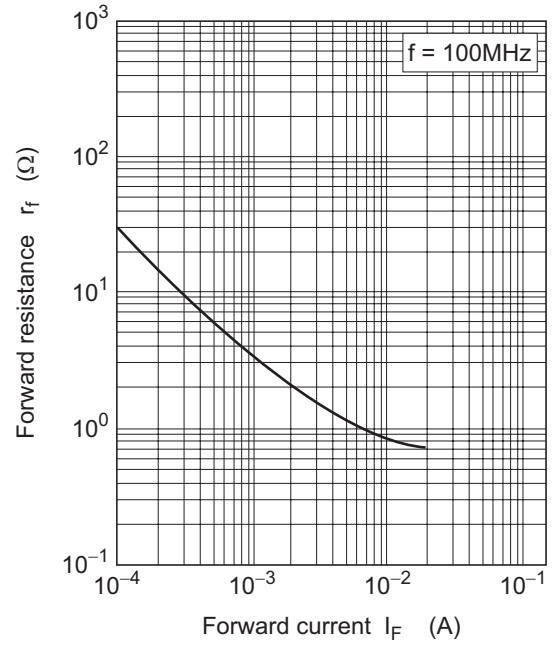
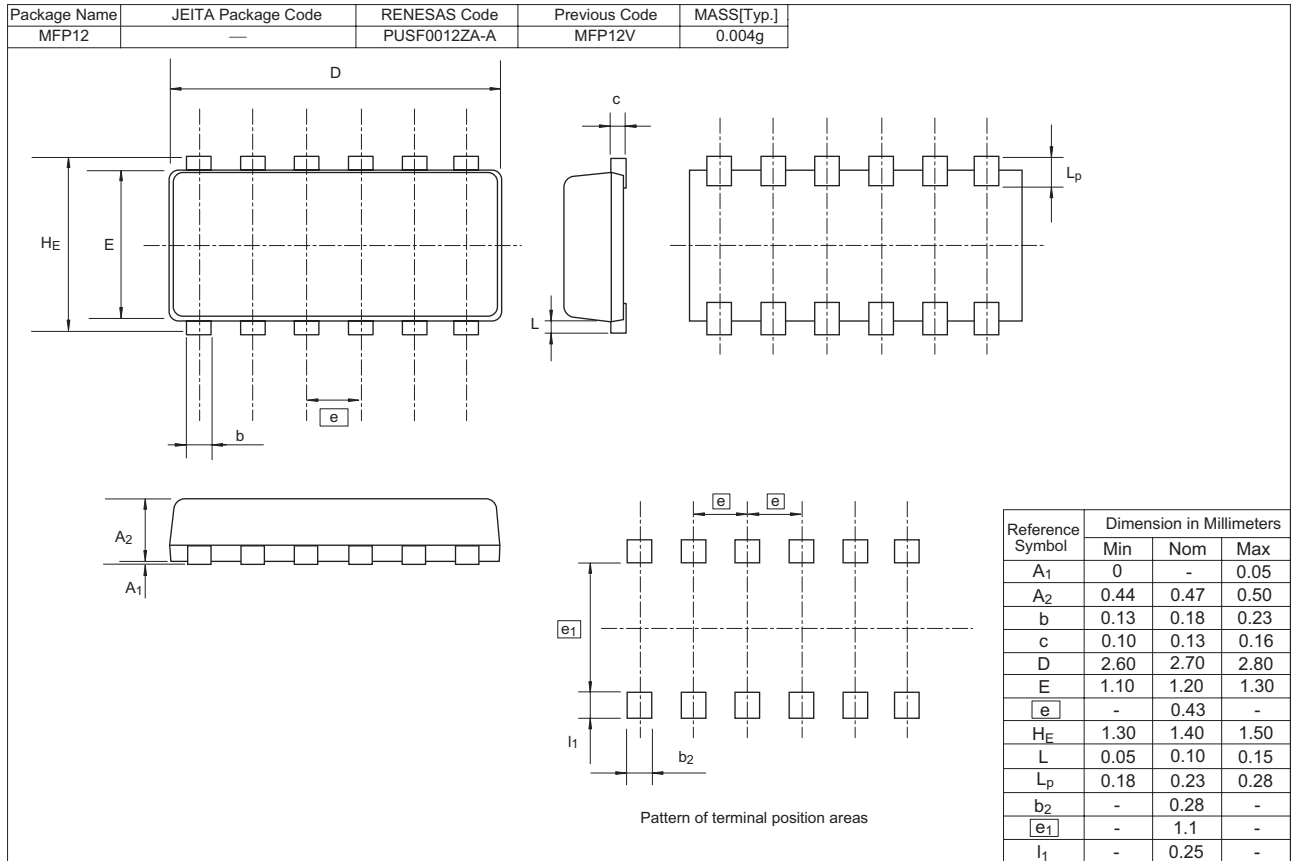


Fig.4 Forward resistance vs. Forward current

Package Dimensions



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Renesas Electronics Corporation

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