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April 1st, 2010
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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RKS152KJ

Silicon Epitaxial Planar Diode for UHF/VHF tuner Band Switch

REJ03G1871-0100

Rev.1.00

Jan 28, 2010

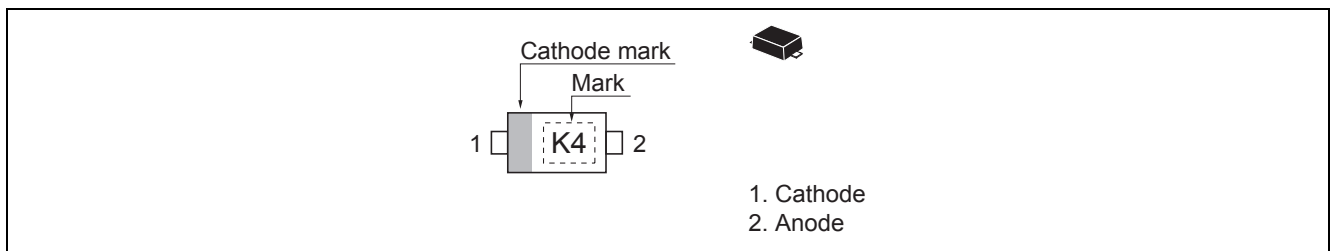
Features

- Low forward resistance. ($r_f = 0.7 \Omega$ max)
- Ultra small Flat Lead Package (UFP) is suitable for surface mount design.

Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKS152KJ P RKS152KJ R	K4	UFP	PWSF0002ZA-A	P (4,000 pcs / reel) R (8,000 pcs / reel)

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	35	V
Power dissipation	P_d	150	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55to +150	°C

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	—	—	50	nA	$V_R = 30 \text{ V}$
Capacitance	$C_{1.5}$	1.5	—	1.9	pF	$V_R = 1.5 \text{ V}, f = 1 \text{ MHz}$
	C_{25}	0.70	—	1.0	pF	$V_R = 25 \text{ V}, f = 1 \text{ MHz}$
Forward resistance	r_f	—	—	0.7	Ω	$I_F = 2 \text{ mA}, f = 100 \text{ MHz}$

Note: For UFP package, the material of lead is exposed for cutting plane. There for, soldering nature of lead tip part is considered as unquestioned. Please kindly consider soldering nature.

Main Characteristics

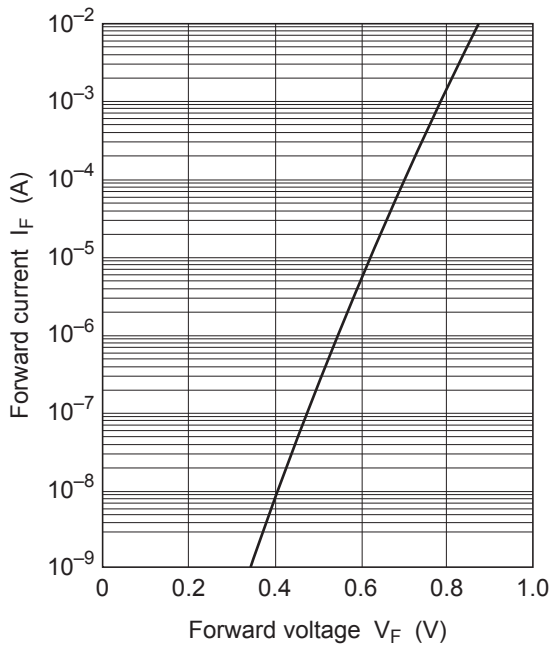


Fig.1 Forward current vs. Forward voltage

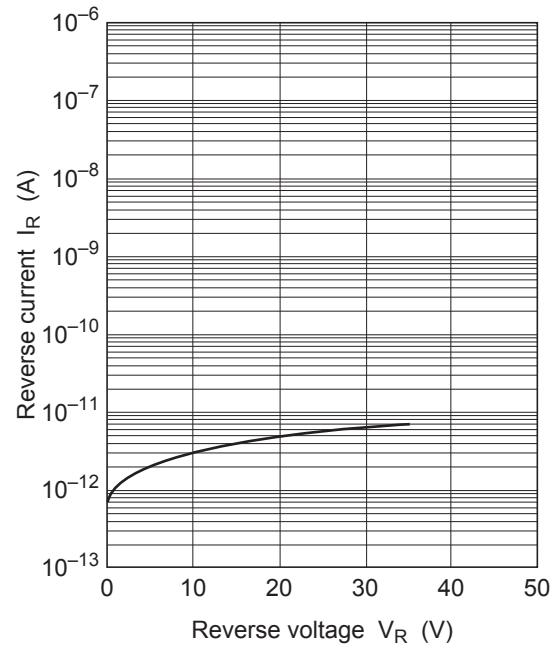


Fig.2 Reverse current vs. Reverse voltage

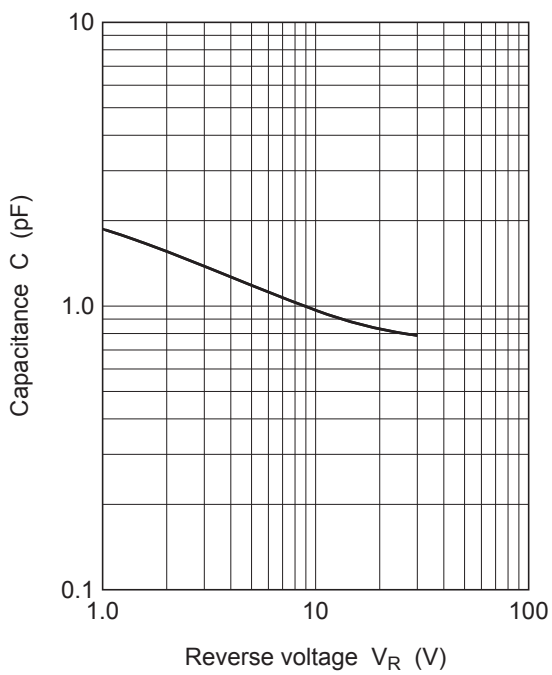


Fig.3 Capacitance vs. Reverse voltage

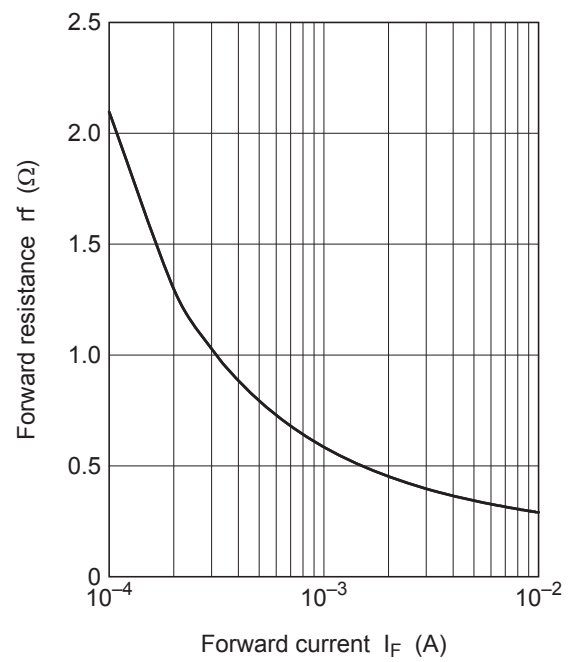
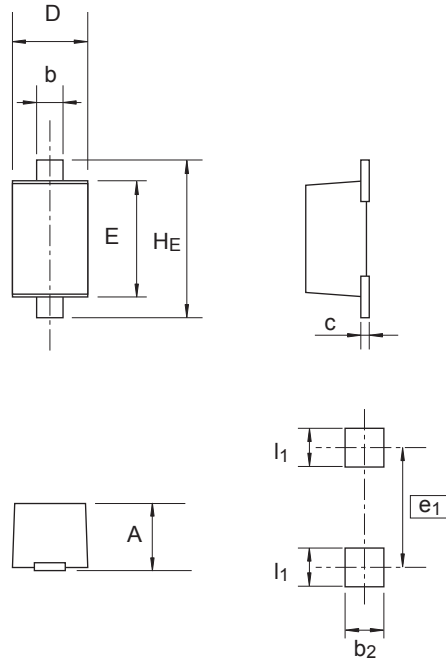


Fig.4 Forward resistance vs. Forward current

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
UFP	SC-79	PWSF0002ZA-A	UFP / UFPV	0.0016g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.50	0.60	0.70
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.70	0.80	0.90
E	1.10	1.20	1.30
HE	1.50	1.60	1.70
b2	—	0.80	—
e1	—	1.70	—
l1	—	0.60	—

Notes:

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