RKP300WKQE

Silicon Epitaxial Planar Pin Diode for Antenna Switching

REJ03G1730-0100
Rev.1.00
Aug 21, 2008

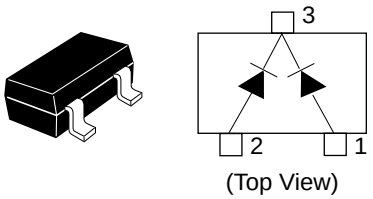
Features

- Suitable for an antenna switches of wireless LAN and a cordless telephone.
- Super -Low capacitance.(C = 0.25 pF max)
- Low forward resistance. (rf = 3.7 Ω max)
- CMPAK Package is suitable for high density surface mounting and high speed assembly.

Ordering Information

Part No.	Laser Mark	Package Name	Package Code
RKP300WKQE	P8	CMPAK	PTSP0003ZB-A

Pin Arrangement



(Top View)

1. Anode
2. Anode
3. Cathode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Reverse voltage	V_R	30	V
Forward current	I_F	50	mA
Power dissipation	Pd *	200	mW
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

Note: Per one device 100 mW.

Electrical Characteristics

(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	—	—	0.25	pF	V_R = 20 V, f = 1 MHz
Forward resistance	r_f	—	—	3.7	Ω	I_F = 10 mA, f = 100 MHz

Main Characteristics

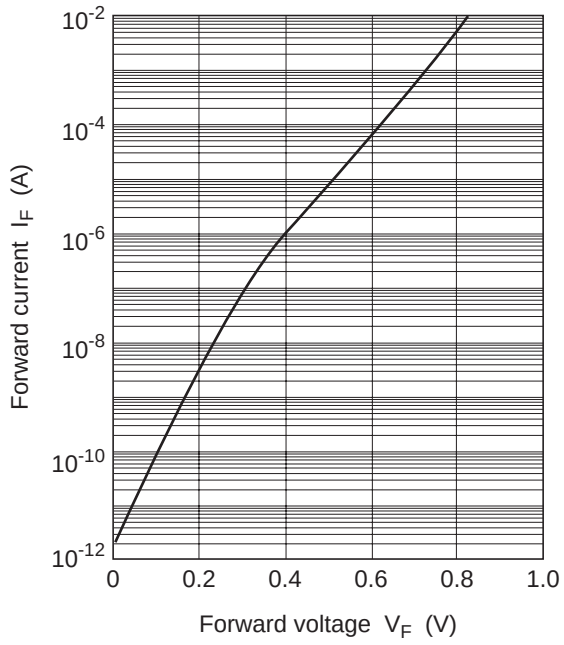


Fig.1 Forward current vs. Forward voltage

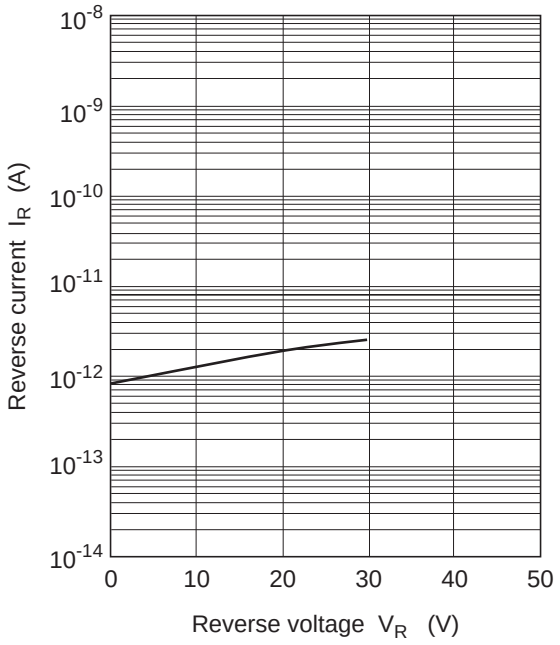


Fig.2 Reverse current vs. Reverse voltage

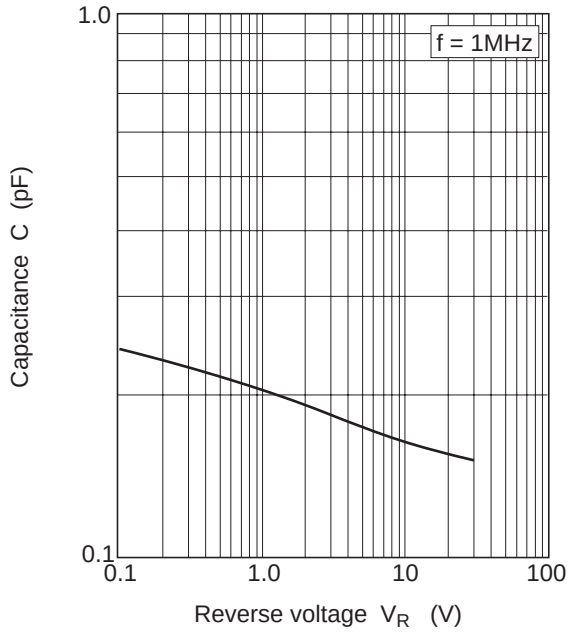


Fig.3 Capacitance vs. Reverse voltage

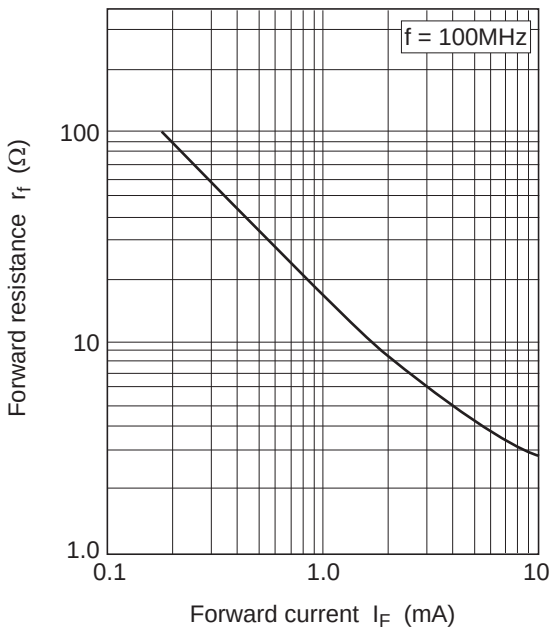
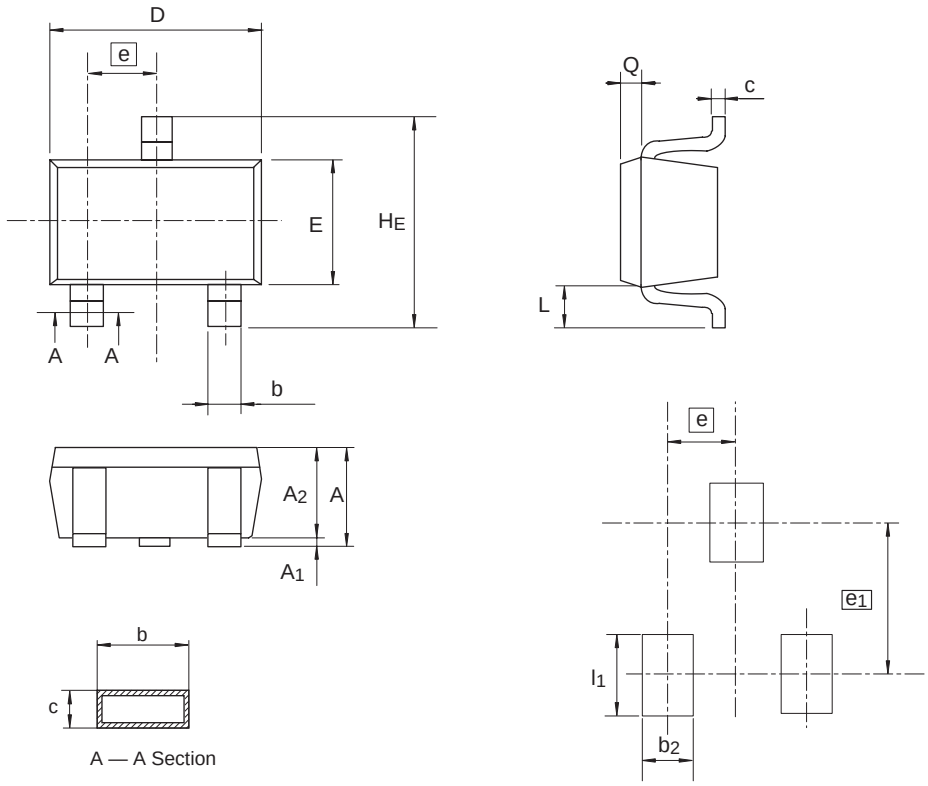


Fig.4 Forward resistance vs. Forward current

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
CMPAK	SC-70	PTSP0003ZB-A	CMPAK / CMPAKV	0.006g



Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.8	-	1.1
A_1	0	-	0.1
A_2	0.8	0.9	1.0
b	0.25	0.3	0.4
c	0.1	0.16	0.26
D	1.8	2.0	2.2
E	1.15	1.25	1.35
e	-	0.65	-
H_E	1.8	2.1	2.4
L	-	0.425	-
b_2	-	-	0.45
e_1	-	1.5	-
l_1	-	-	0.9
Q	-	0.2	-

Renesas Technology Corp. Sales Strategic Planning Div. Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan

RENESAS SALES OFFICES

http://www.renesas.com

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

Renesas Technology America, Inc.
450 Holger Way, San Jose, CA 95134-1368, U.S.A
Tel: <1> (408) 382-7500, Fax: <1> (408) 382-7501

Renesas Technology Europe Limited
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K.
Tel: <44> (1628) 585-100, Fax: <44> (1628) 585-900

Renesas Technology (Shanghai) Co., Ltd.
Unit 204, 205, AZIACenter, No.1233 Lujiazui Ring Rd, Pudong District, Shanghai, China 200120
Tel: <86> (21) 5877-1818, Fax: <86> (21) 6887-7858/7898

Renesas Technology Hong Kong Ltd.
7th Floor, North Tower, World Finance Centre, Harbour City, Canton Road, Tsimshatsui, Kowloon, Hong Kong
Tel: <852> 2265-6688, Fax: <852> 2377-3473

Renesas Technology Taiwan Co., Ltd.
10th Floor, No.99, Fushing North Road, Taipei, Taiwan
Tel: <886> (2) 2715-2888, Fax: <886> (2) 3518-3399

Renesas Technology Singapore Pte. Ltd.
1 Harbour Front Avenue, #06-10, Keppel Bay Tower, Singapore 098632
Tel: <65> 6213-0200, Fax: <65> 6278-8001

Renesas Technology Korea Co., Ltd.
Kukje Center Bldg. 18th Fl., 191, 2-ka, Hangang-ro, Yongsan-ku, Seoul 140-702, Korea
Tel: <82> (2) 796-3115, Fax: <82> (2) 796-2145

Renesas Technology Malaysia Sdn. Bhd
Unit 906, Block B, Menara Amcorp, Amcorp Trade Centre, No.18, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia
Tel: <603> 7955-9390, Fax: <603> 7955-9510

Colophon .7.2