RKD703KL

Silicon Schottky Barrier Diode for high Speed Switching

REJ03G1756-0200
Rev.2.00
Oct 20, 2009

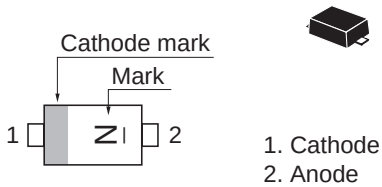
Features

- Low Power consumption (Low reverse leak current) and high speed (Low capacitance).
- We can support the lineup of environmental friendly halogen free type on your demand.
- Extremely small Flat Lead Package (EFP) is suitable for compact and high-density surface mount design.

Ordering Information

Part No	Laser Mark	Package Name	Package Code	Taping Abbreviation (Quantity)
RKD703KL R	N	EFP	PXSF0002ZA-A	R (10,000 pcs / reel)

Pin Arrangement



1. Cathode
2. Anode

Absolute Maximum Ratings

(Ta = 25°C)

Item	Symbol	Value	Unit
Repetitive peak reverse voltage	V_{RRM}	30	V
Average forward current	I_O *1	100	mA
Non-Repetitive Peak forward surge current	I_{FSM} *2	200	mA
Junction temperature	Tj	125	°C
Storage temperature	Tstg	–55 to +125	°C

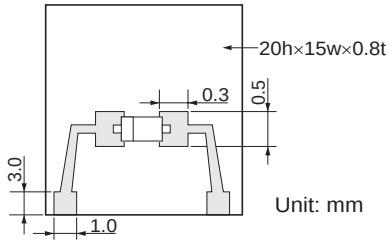
Notes: 1. See from Fig.4 to Fig.6.
2. 10 ms sine wave 1 pulse.

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Min	Typ	Max	Unit	Test Condition
Forward voltage	V_{F1}	—	—	0.25	V	I_F = 1 mA
	V_{F2}	—	—	0.30	V	I_F = 5 mA
	V_{F3}	—	—	0.35	V	I_F = 20 mA
	V_{F4}	—	—	0.60	V	I_F = 100 mA
Reverse current	I_{R1}	—	—	6	µA	V_R =10 V
	I_{R2}	—	—	50	µA	V_R = 30 V
Capacitance	C	—	—	5	pF	V_R = 1 V, f = 1 MHz
Thermal resistance	Rth<j-a>	—	800	—	°C/W	Polyimide board *1

Notes: 1. Polyimide board



2. In the EFP 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

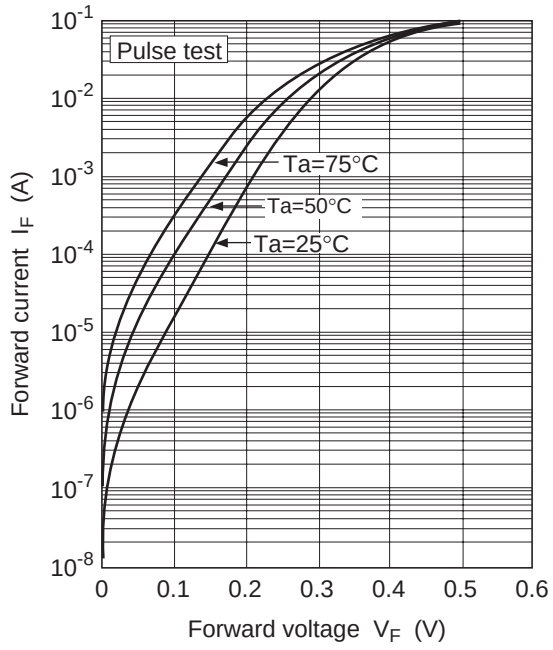


Fig.1 Forward current vs. Forward voltage

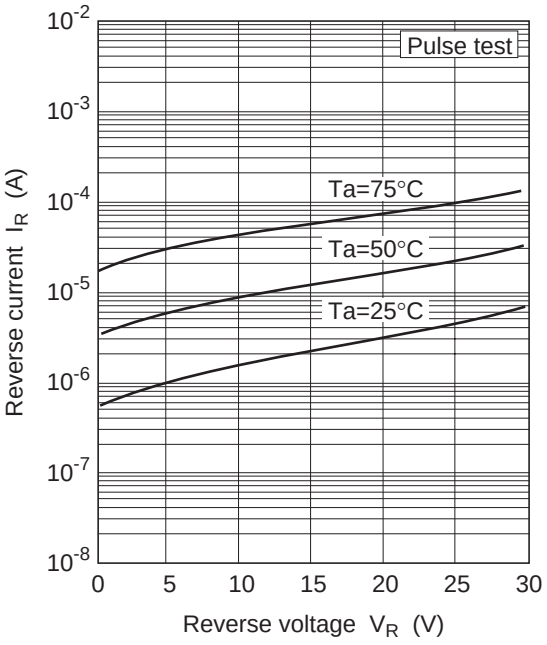


Fig.2 Reverse current vs. Reverse voltage

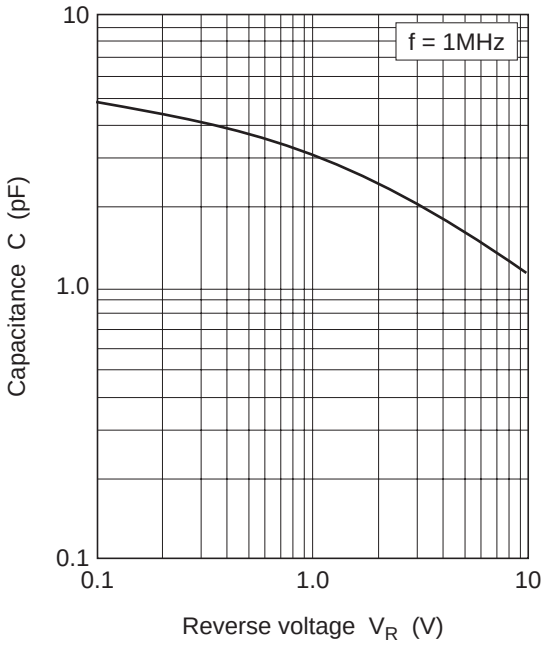


Fig.3 Capacitance vs. Reverse voltage

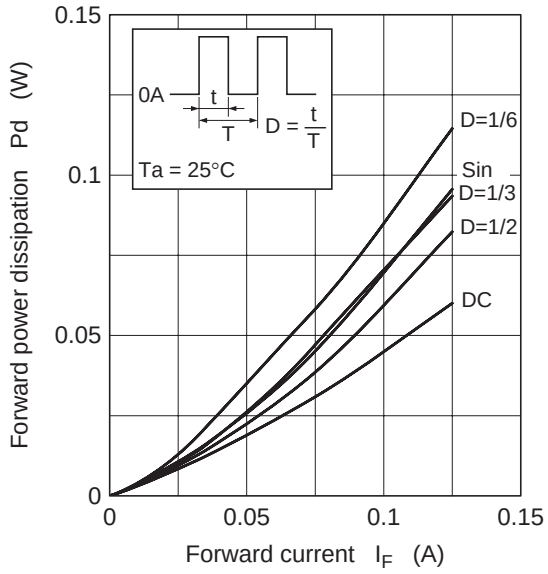


Fig.4 Forward power dissipation vs. Forward current

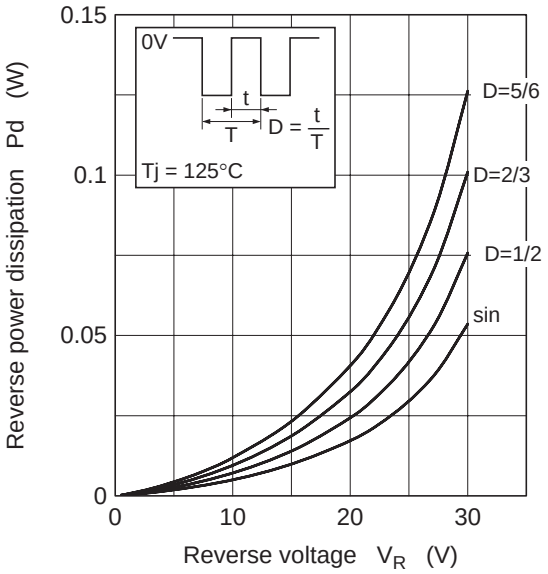


Fig.5 Reverse power dissipation vs. Reverse voltage

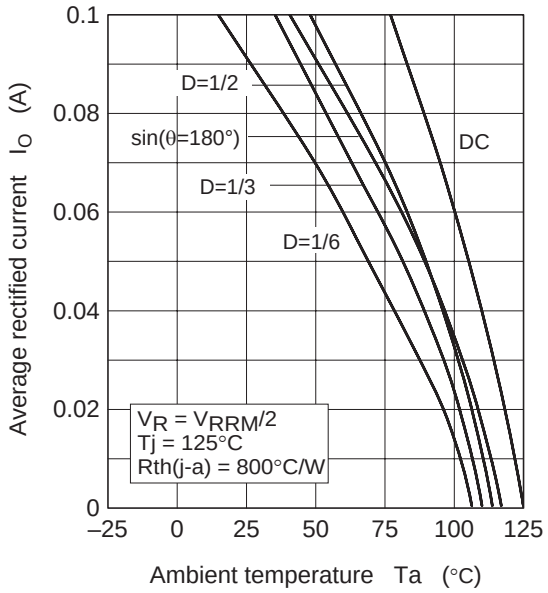
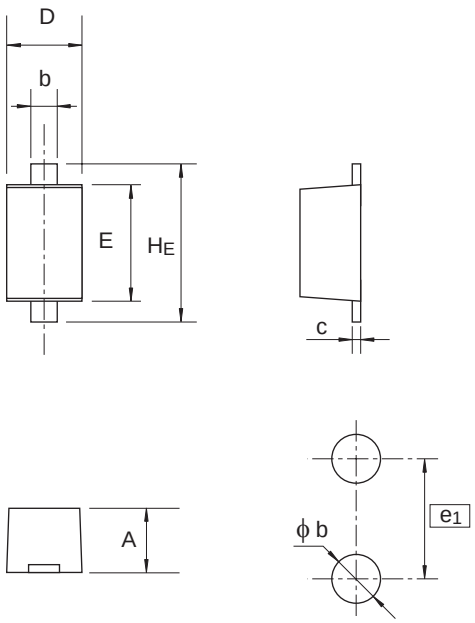


Fig.6 Average rectified current vs. Ambient temperature

Package Dimensions

Package Name	JEITA Package Code	RENESAS Code	Previous Code	MASS[Typ.]
EFP	—	PXSF0002ZA-A	EFP / EFPV	0.0007g



Pattern of terminal position areas

Reference Symbol	Dimension in Millimeters		
	Min	Nom	Max
A	0.44	0.47	0.50
b	0.25	0.30	0.35
c	0.08	0.13	0.18
D	0.55	0.60	0.65
E	0.75	0.80	0.85
H_E	0.95	1.00	1.05
ϕ b	—	0.40	—
e1	—	1.00	—

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