

RKD703KL

Silicon Schottky Barrier Diode for high Speed Switching

REJ03G1756-0200

Rev.2.00

Oct 20, 2009

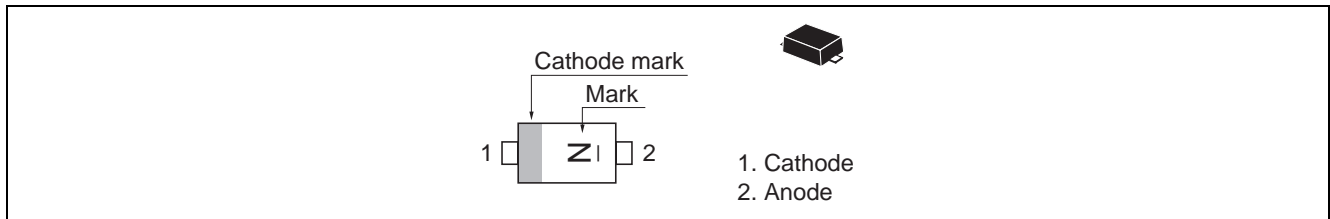
Features

- 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



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 | T_j | 125 | °C |
| Storage temperature | T_{stg} | -55 to +125 | °C |

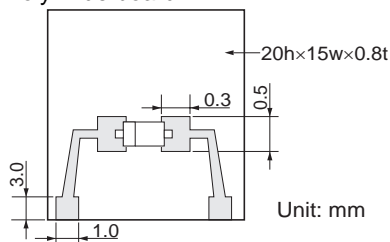
Notes: 1. See from Fig.4 to Fig.6.
 2. 10 ms sine wave 1 pulse.

Electrical Characteristics

(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|--------------------|-----------------|-----|-----|------|------|--|
| Forward voltage | V_{F1} | — | — | 0.25 | V | $I_F = 1 \text{ mA}$ |
| | V_{F2} | — | — | 0.30 | V | $I_F = 5 \text{ mA}$ |
| | V_{F3} | — | — | 0.35 | V | $I_F = 20 \text{ mA}$ |
| | V_{F4} | — | — | 0.60 | V | $I_F = 100 \text{ mA}$ |
| Reverse current | I_{R1} | — | — | 6 | μA | $V_R = 10 \text{ V}$ |
| | I_{R2} | — | — | 50 | μA | $V_R = 30 \text{ V}$ |
| Capacitance | C | — | — | 5 | pF | $V_R = 1 \text{ V}, f = 1 \text{ MHz}$ |
| Thermal resistance | $R_{th< j-a >}$ | — | 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

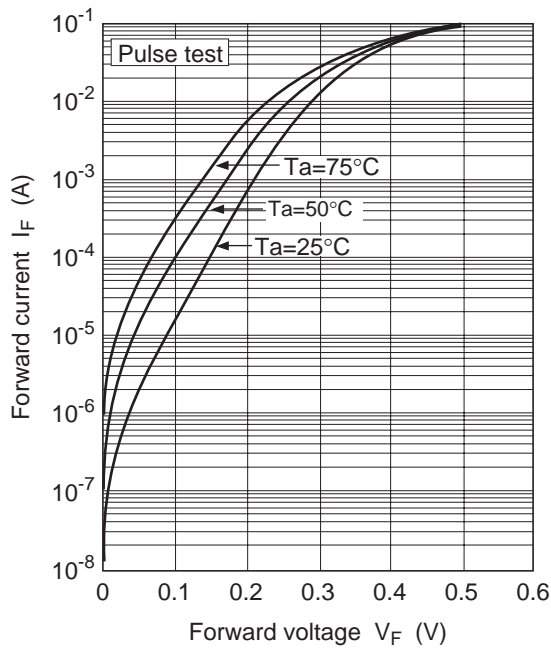


Fig.1 Forward current vs. Forward voltage

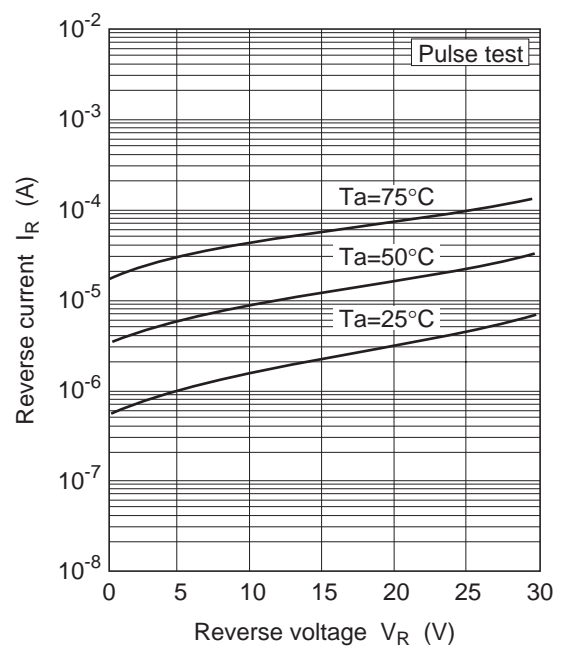


Fig.2 Reverse current vs. Reverse voltage

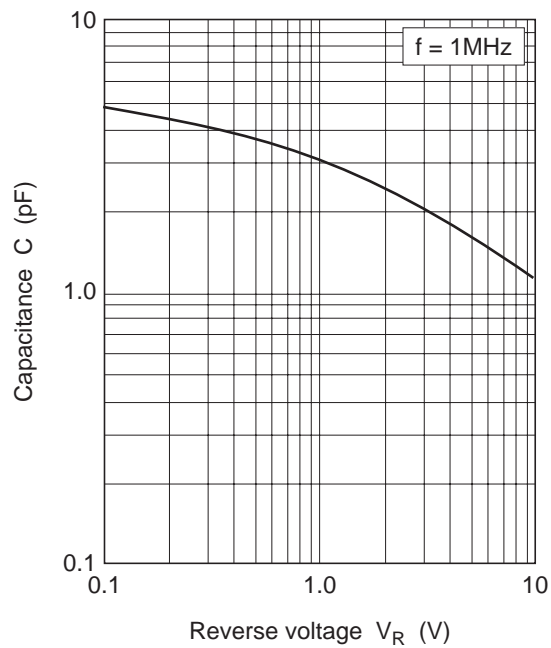


Fig.3 Capacitance vs. Reverse voltage

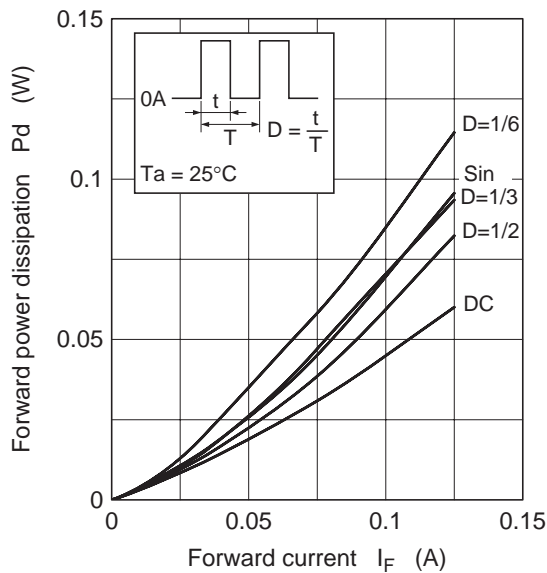


Fig.4 Forward power dissipation vs. Forward current

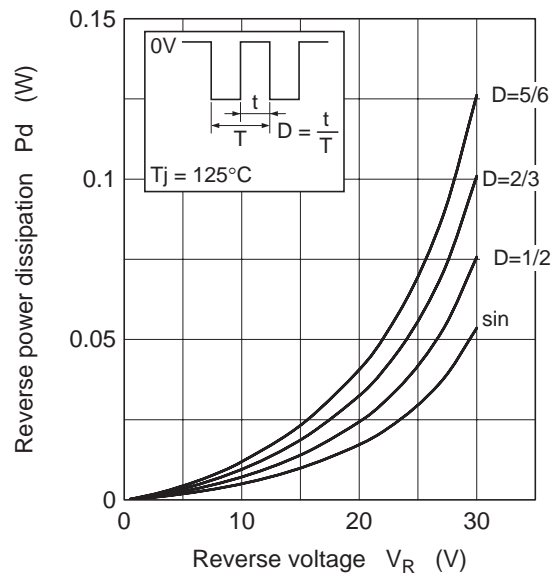


Fig.5 Reverse power dissipation vs. Reverse voltage

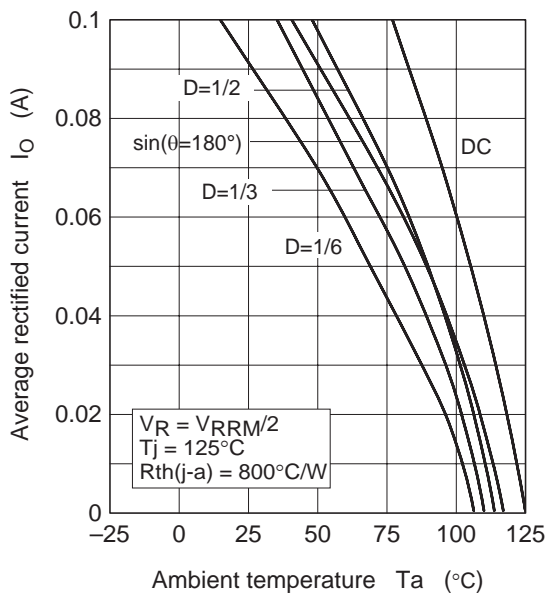
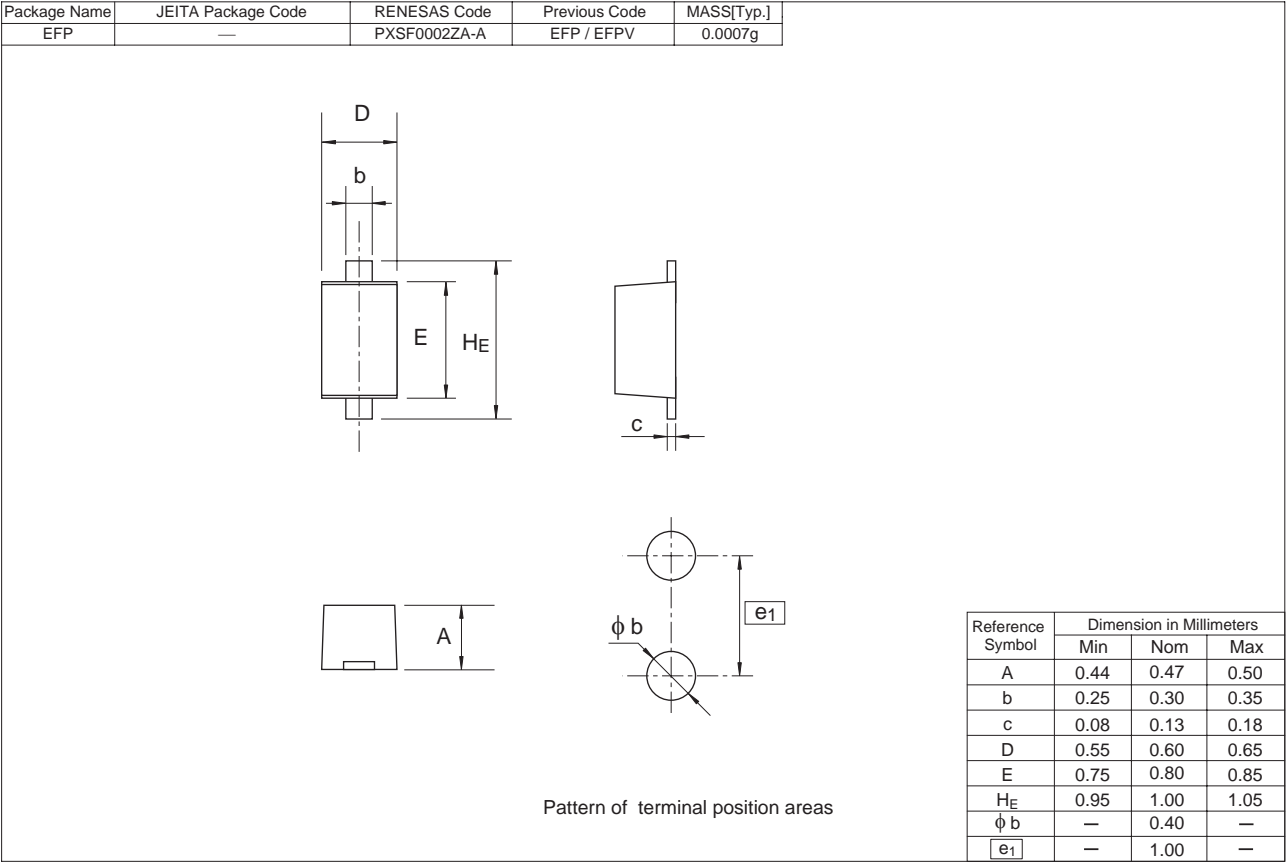


Fig.6 Average rectified current vs. Ambient temperature

Package Dimensions



Notes:

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