

RKZ6.2KL

Silicon Planar Zener Diode for Surge Absorption

REJ03G1253-0100
Rev.1.00
Nov 16, 2005

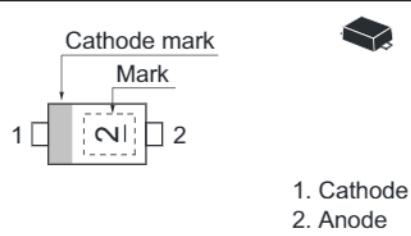
Features

- IEC61000-4-2 Contact discharge : 30kV
- Extremely small Flat Lead Package (EFP) is suitable for surface mount design.

Ordering Information

| Type No. | Laser Mark | Package Name | Package Code (Previous Code) |
|----------|------------|--------------|---------------------------------|
| RKZ6.2KL | 2 | EFP | PXSF0002ZA-A (EFP) |

Pin Arrangement



Absolute Maximum Ratings

(Ta = 25°C)

| Item | Symbol | Value | Unit |
|----------------------|--------|-------------|------|
| Power dissipation | Pd * | 100 | mW |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | Tstg | -55 to +150 | °C |

Note: See Fig.2.

Electrical Characteristics

(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|-------------------------------|--------|------|-----|------|------|--|
| Zener voltage | Vz | 5.86 | — | 6.53 | V | Iz = 5 mA, 40 ms pulse |
| Reverse current | Ir | — | — | 2 | mA | VR = 3.0 V |
| Dynamic resistance | rd | — | — | 50 | Ω | Iz = 5 mA |
| ESD-Capability * ¹ | — | 30 | — | — | kV | C = 150 pF, R = 330 Ω, Both Forward and reverse direction 10 pulse |

Notes: 1. Failure criterion ; Ir > 2 mA at VR = 3.0 V.

2. Please do not use the soldering iron due to avoid high stress.
3. For EFP 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 Characteristic

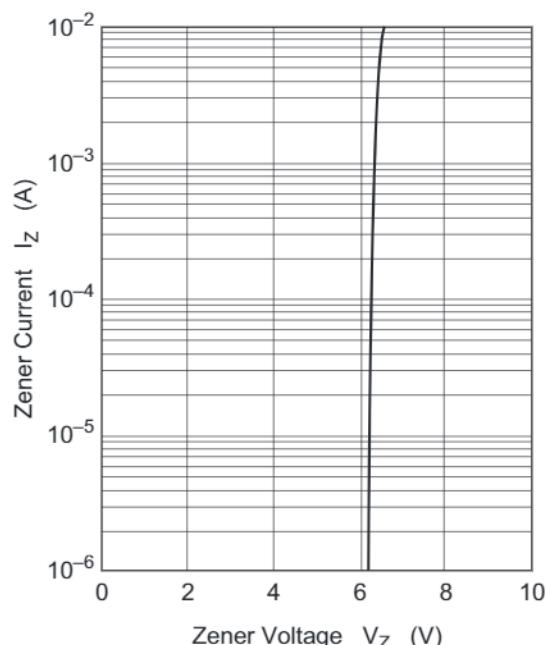


Fig.1 Zener current vs. Zener voltage

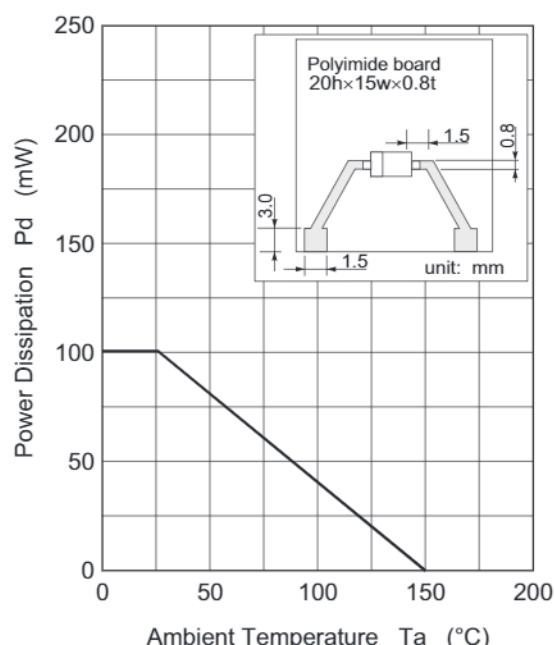


Fig.2 Power Dissipation vs. Ambient Temperature

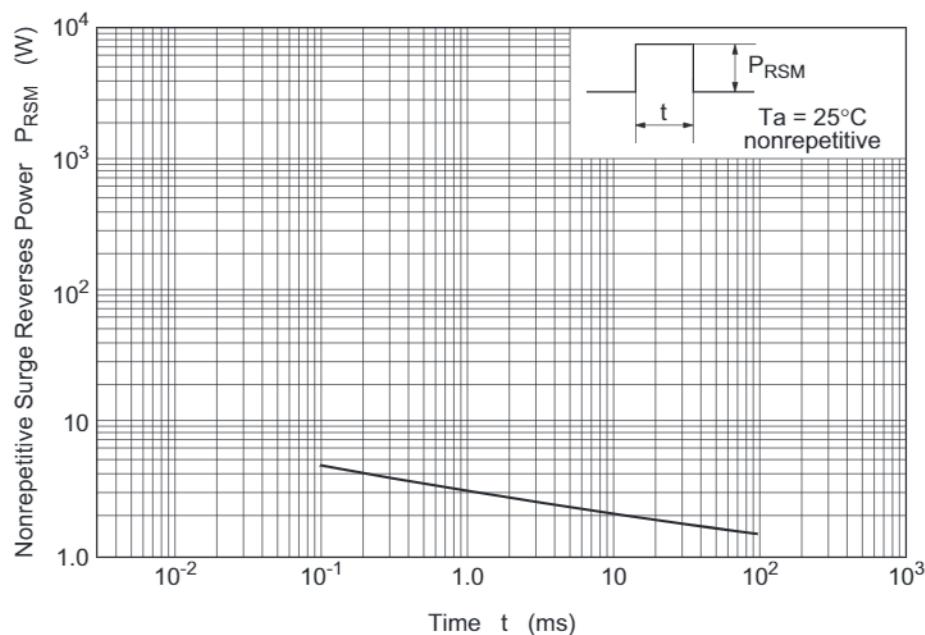
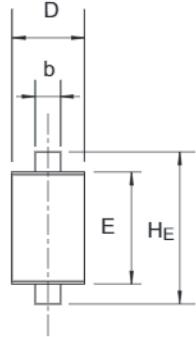


Fig.3 Surge Reverse Power Ratings

Package Dimensions

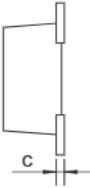
| Package Name | JEITA Package Code | RENESAS Code | Previous Code | MASS[Typ.] |
|--------------|--------------------|--------------|---------------|------------|
| EFP | — | PXSF0002ZA-A | EFP / EFPV | 0.0007g |



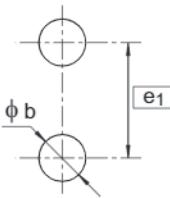
3D Perspective View of the EFP package showing dimensions D, b, E, and H_E .



Top View showing dimension A.



Side View showing dimension c.



Pattern of terminal position areas showing a circle with diameter ϕb and a vertical dimension e_1 .

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 |
| ϕb | — | 0.40 | — |
| e_1 | — | 1.00 | — |

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