

# SHINDENGEN

## General Purpose Rectifiers

Dual

# S1ZA60

## 600V 1.1A

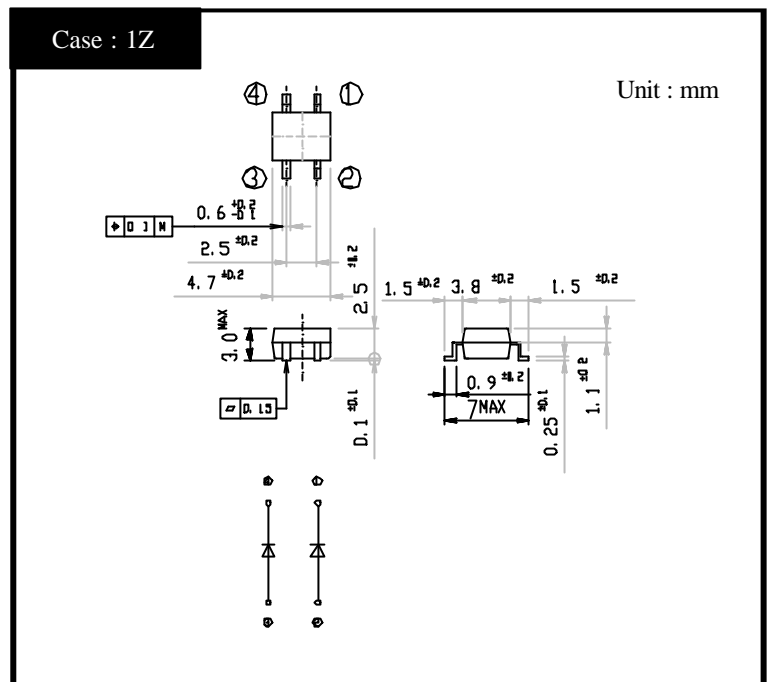
### FEATURES

- Small SMT package
- Array
- High reliability with superior moisture resistance
- Applicable to Automatic Insertion

### APPLICATION

- Conventional Rectification
- Motor
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified  $T_I=25$  )

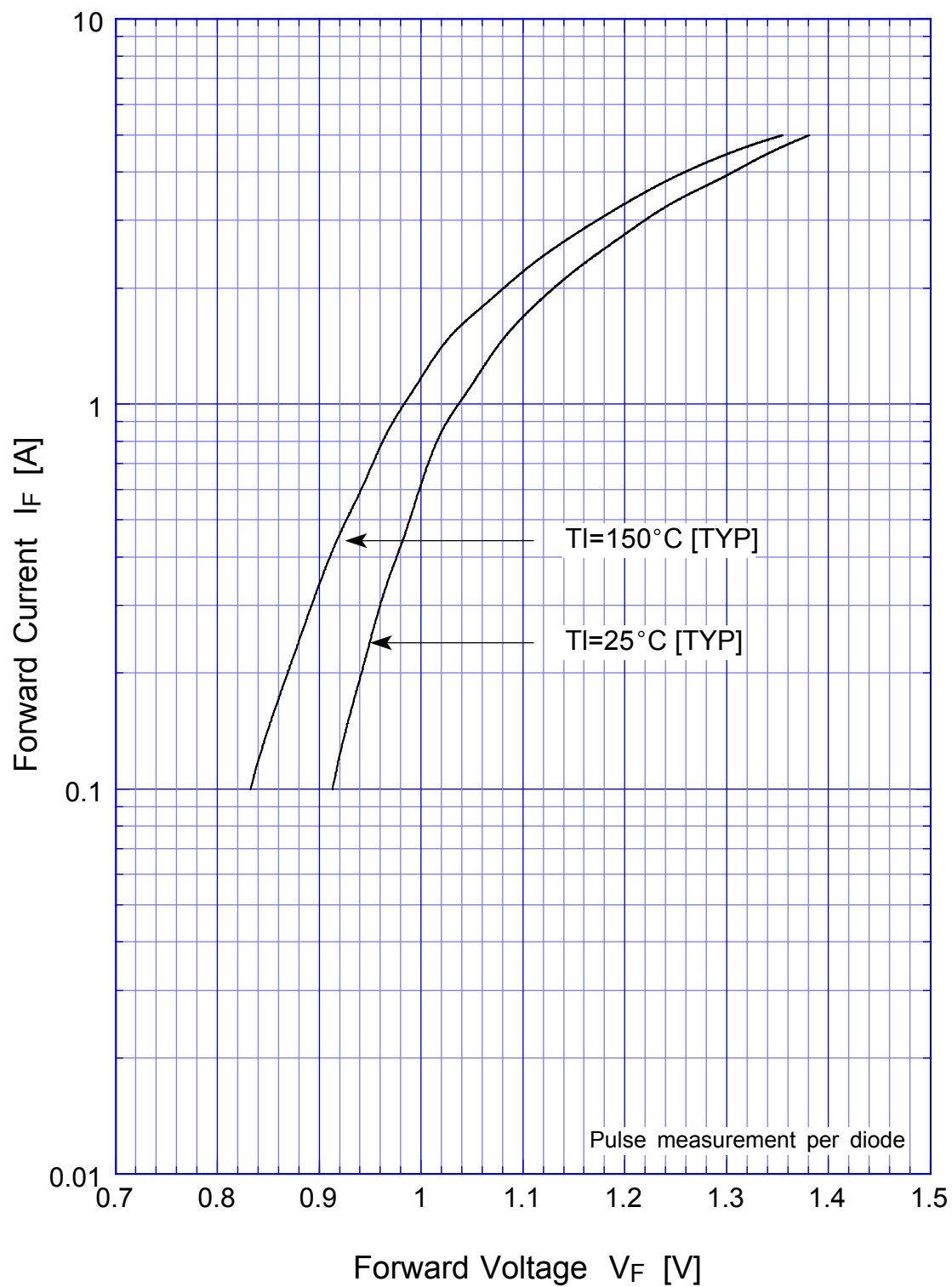
| Item                              | Symbol    | Conditions  | Ratings   | Unit |
|-----------------------------------|-----------|---|-----------|------|
| Storage Temperature               | $T_{stg}$ |   | -40 ~ 150 |      |
| Operating Junction Temperature    | $T_J$     |   | 150       |      |
| Maximum Reverse Voltage           | $V_{RM}$  |   | 600       | V    |
| Average Rectified Forward Current | $I_O$     | 50Hz sine wave, R-load, $T_a=25$ On alumina substrate 1 element operation     | 1.1       | A    |
|                                   |           | 50Hz sine wave, R-load, $T_a=25$ On alumina substrate 2 element operation     | 0.8       |      |
|                                   |           | 50Hz sine wave, R-load, $T_a=25$ On glass-epoxy substrate 1 element operation | 0.9       |      |
|                                   |           | 50Hz sine wave, R-load, $T_a=25$ On glass-epoxy substrate 2 element operation | 0.63      |      |
| Peak Surge Forward Current        | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1cycle peak value, $T_I=25$                    | 30        | A    |

Electrical Characteristics (If not specified  $T_I=25$  )

| Item               | Symbol        | Conditions   | Ratings | Unit    |
|--------------------|---------------|--|---------|---------|
| Forward Voltage    | $V_F$         | $I_F=0.9A$ , Pulse measurement, Rating of per diode              | Max.1.1 | V       |
| Reverse Current    | $I_R$         | $V_R=V_{RM}$ , Pulse measurement, Rating of per diode            | Max.10  | $\mu A$ |
| Thermal Resistance | $\theta_{ja}$ | junction to ambient On alumina substrate 1 element operation     | Max.93  | /W      |
|                    |               | junction to ambient On alumina substrate 2 element operation     | Max.140 |         |
|                    |               | junction to ambient On glass-epoxy substrate 1 element operation | Max.120 |         |
|                    |               | junction to ambient On glass-epoxy substrate 2 element operation | Max.186 |         |

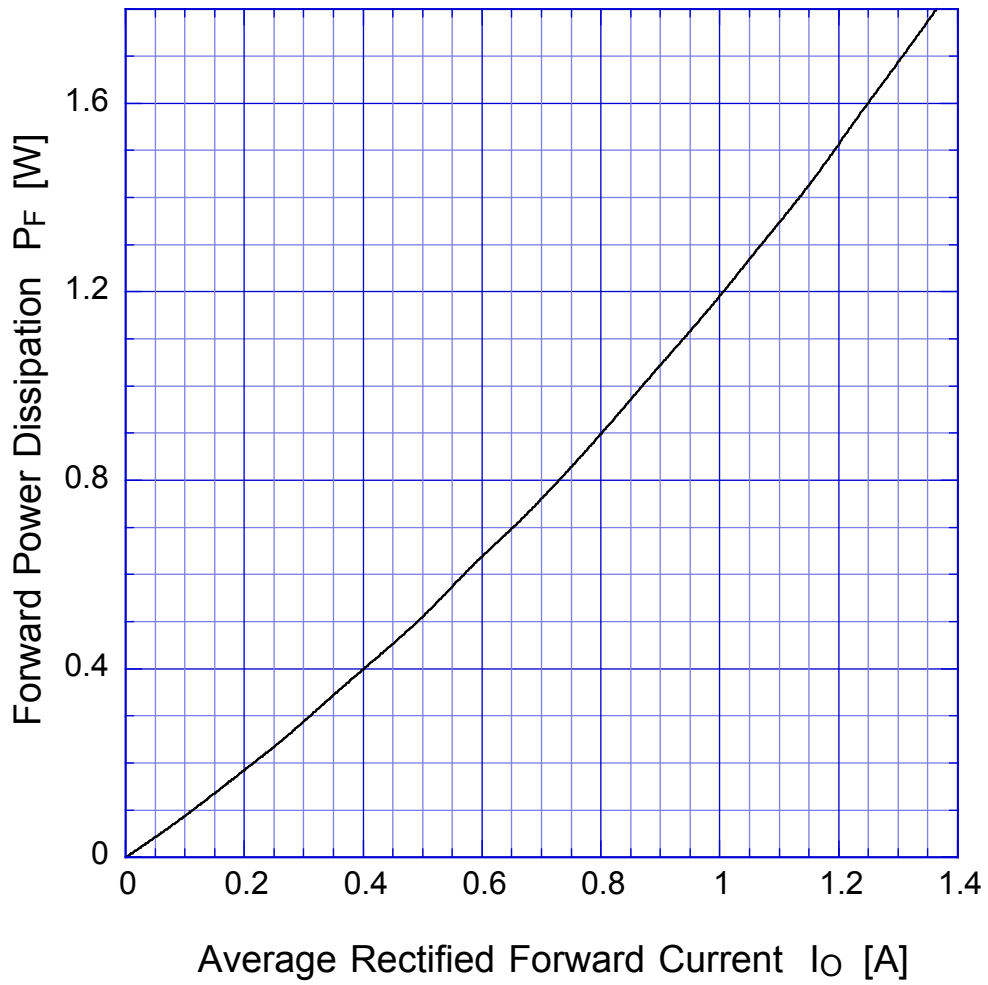
S1ZAx

Forward Voltage



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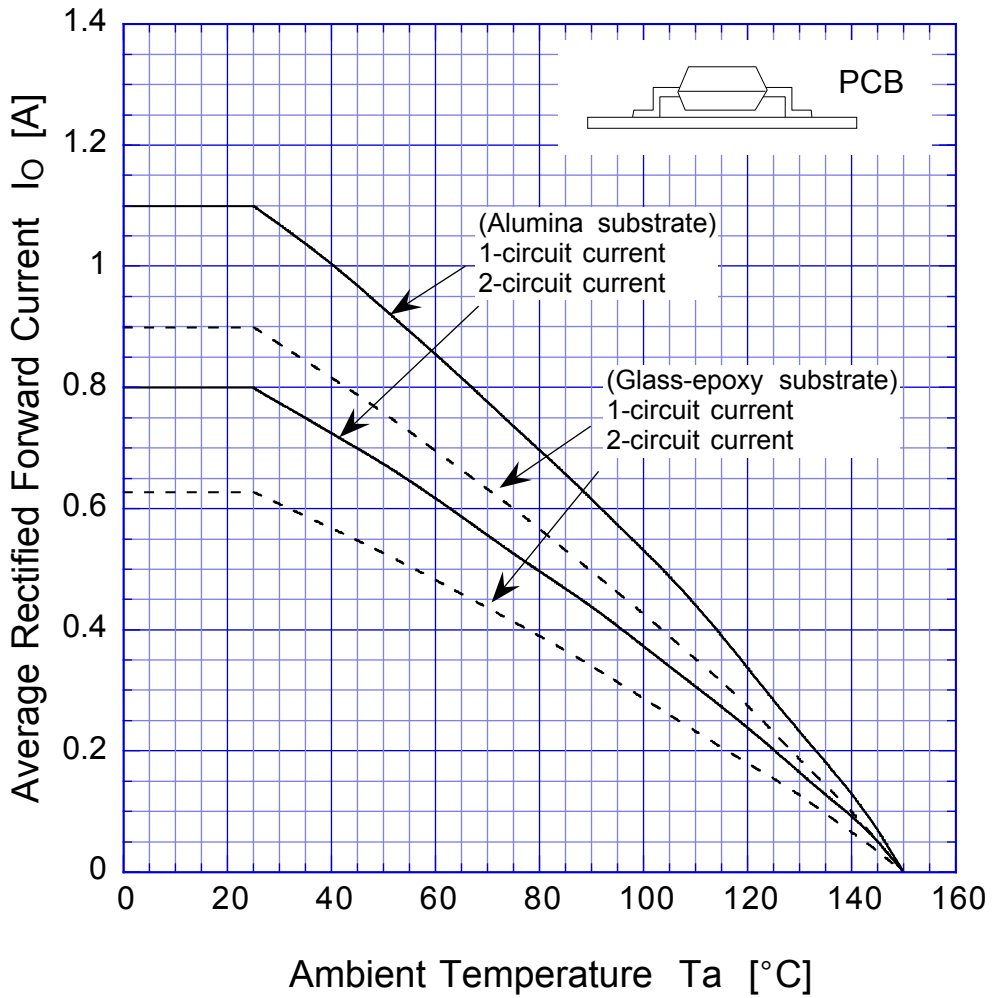
Forward Power Dissipation



$T_j = 150^\circ\text{C}$   
Sine wave

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## Derating Curve



Alumina substrate  
Soldering land 1mm  
Conductor layer 20 $\mu$ m  
Substrate thickness 0.64mm

Glass-epoxy substrate  
Soldering land 1mm  
Conductor layer 35 $\mu$ m

Sine wave  
R-load  
Free in air

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## Peak Surge Forward Capability

