

# SHINDENGEN

## General Purpose Rectifiers

Dual

# S1ZA20

## 200V 1.1A

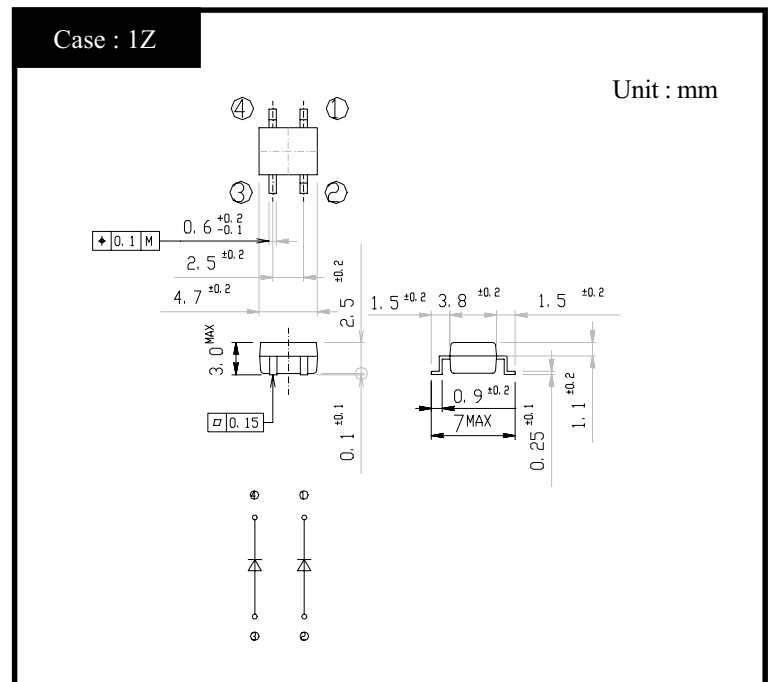
### FEATURES

- 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 $T_I=25^\circ\text{C}$ )

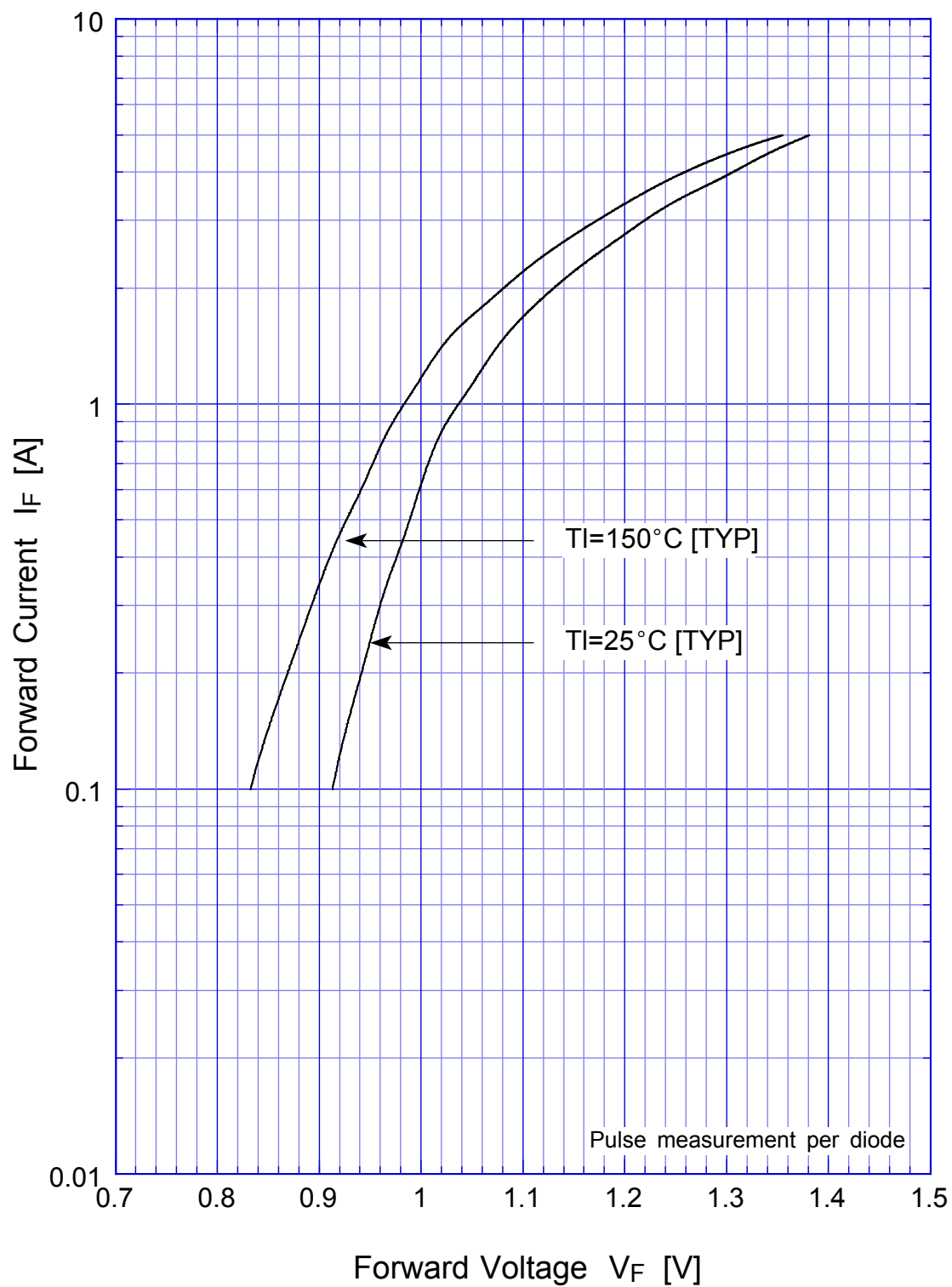
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40~150	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		150	$^\circ\text{C}$
Maximum Reverse Voltage	$V_{RM}$		200	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load $T_a=25^\circ\text{C}$ On alumina substrate 1 element operation	1.1	A
		50Hz sine wave, R-load $T_a=25^\circ\text{C}$ On alumina substrate 2 element operation	0.8	
		50Hz sine wave, R-load $T_a=25^\circ\text{C}$ On glass-epoxy substrate 1 element operation	0.9	
		50Hz sine wave, R-load $T_a=25^\circ\text{C}$ On glass-epoxy substrate 2 element operation	0.63	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ\text{C}$	30	A

#### ● Electrical Characteristics (If not specified $T_I=25^\circ\text{C}$ )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=0.9\text{A}$ , 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	$\mu\text{A}$
Thermal Resistance	$\theta_{ja}$	junction to ambient On alumina substrate 1 element operation	Max.93	$^\circ\text{C/W}$
		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	

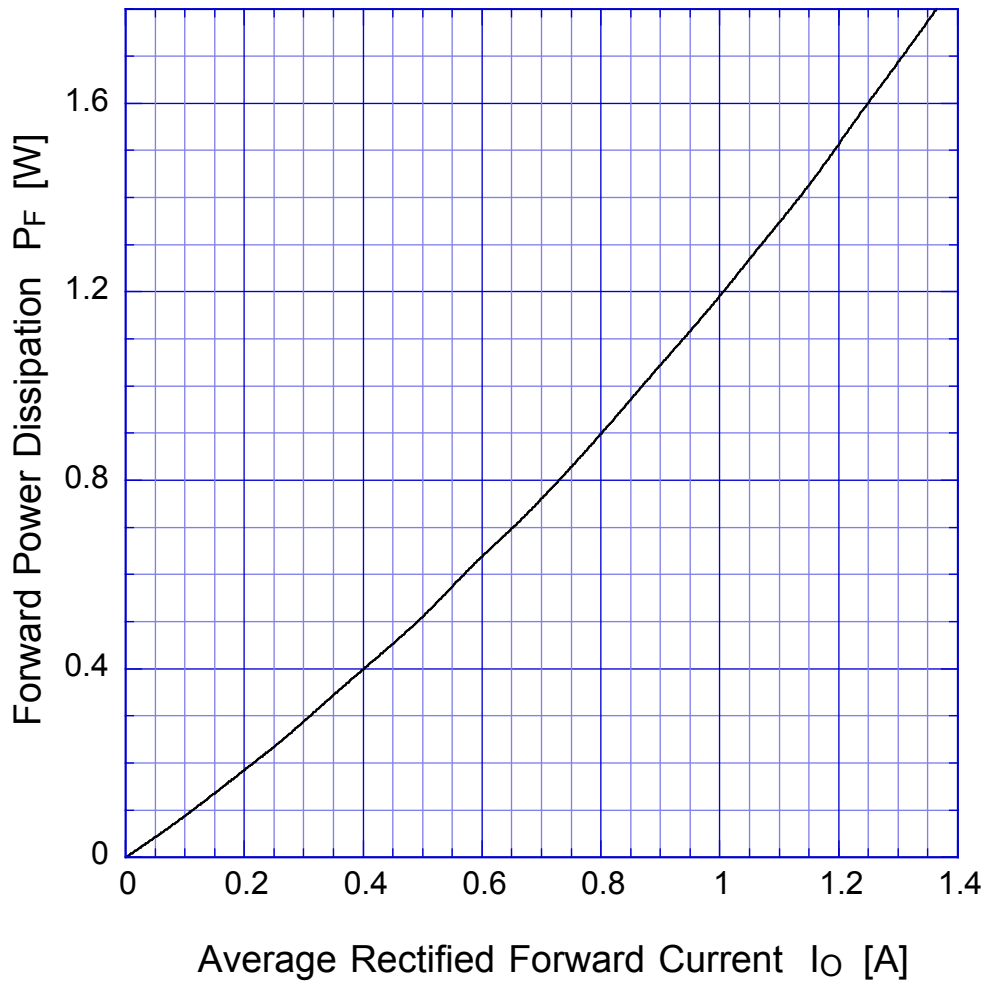
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Forward Voltage



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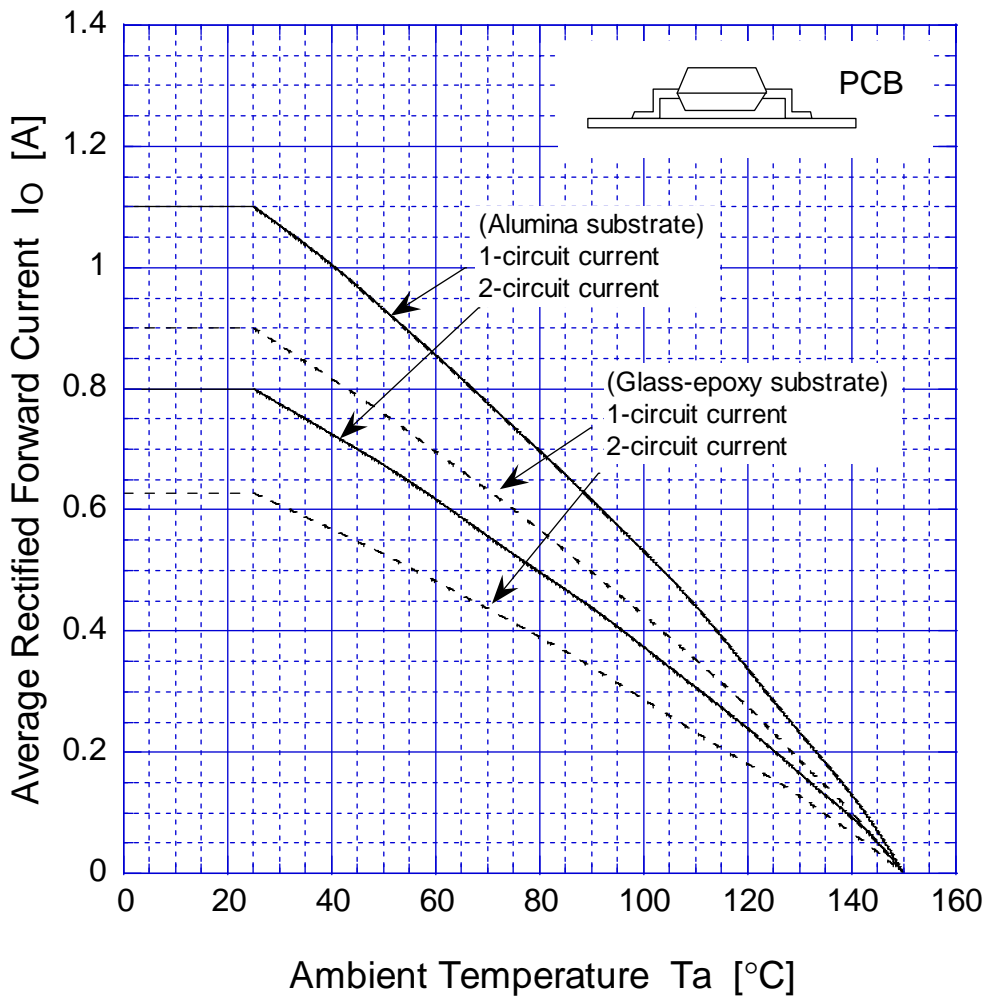
Forward Power Dissipation



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

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# Derating Curve



Alumina substrate  
 Soldering land 1mm×1mm  
 Conductor layer 20μm  
 Substrate thickness 0.64mm

Glass-epoxy substrate  
 Soldering land 1mm×1mm  
 Conductor layer 35μm

Sine wave  
 R-load  
 Free in air

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## Peak Surge Forward Capability

