

# SHINDENGEN

## General Purpose Rectifiers

## SMT Bridges

# S1ZB20

## 200V 0.8A

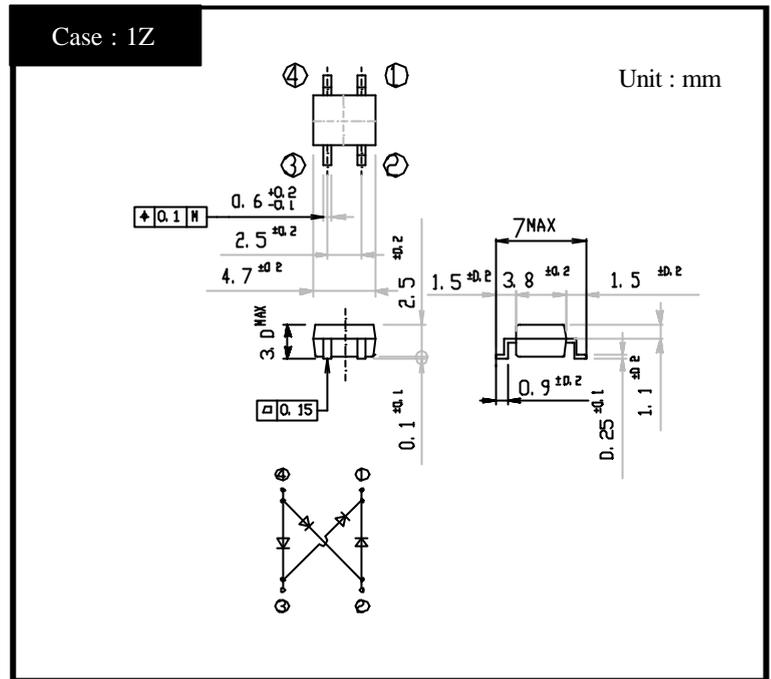
### FEATURES

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

### APPLICATION

- Switching power supply
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified Tl=25 )

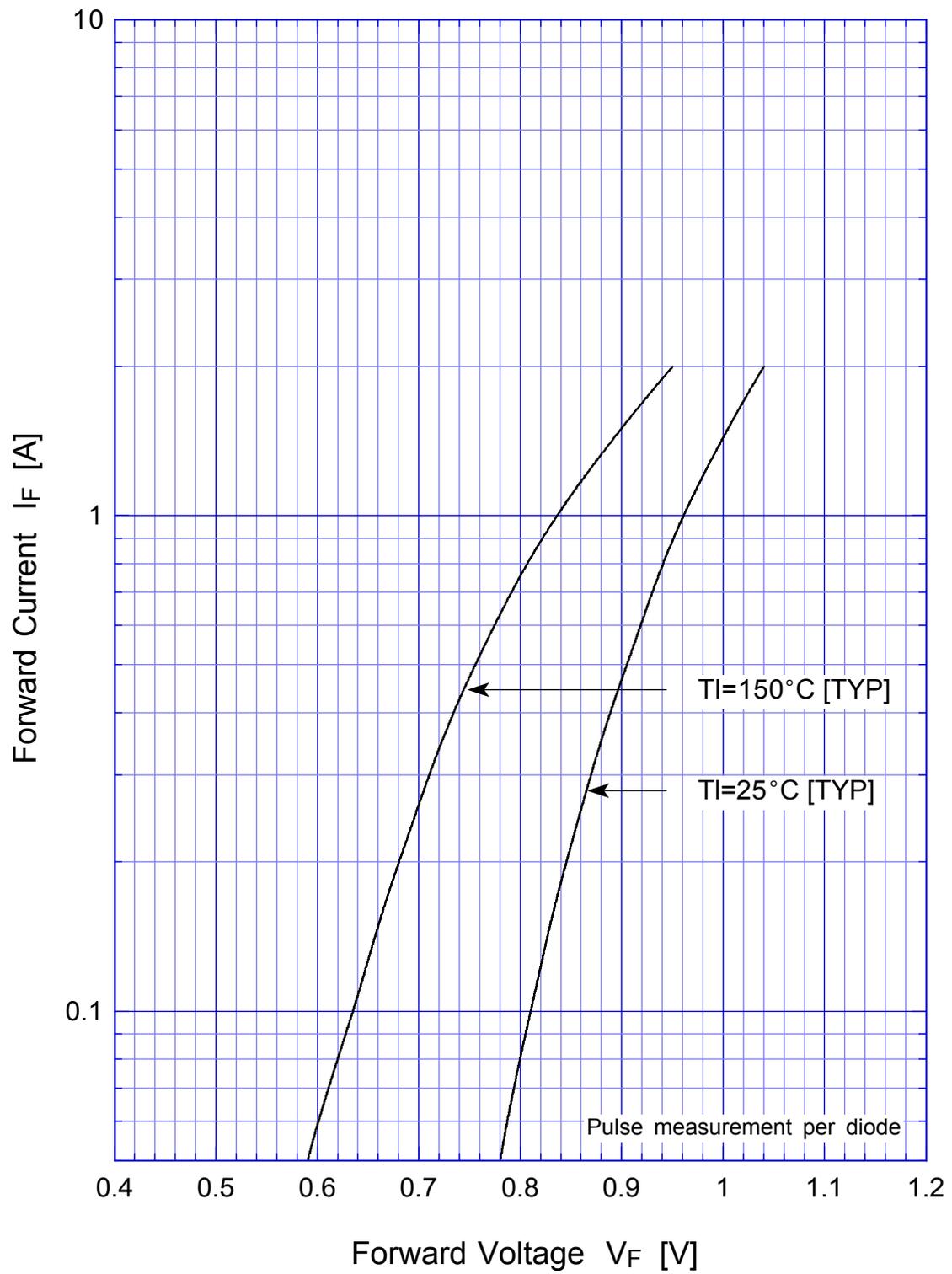
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V <sub>RM</sub>		200	V
Average Rectified Forward Current	I <sub>o</sub>	50Hz sine wave, R-load On alumina substrate Ta=25	0.8	A
		50Hz sine wave, R-load On glass-epoxy substrate Ta=25	0.5	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25	30	A
Current Squared Time	I <sup>2</sup> t	1ms t < 10ms Tj=25	4.5	A <sup>2</sup> s

Electrical Characteristics (If not specified Tl=25 )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =0.4A, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	j-l	junction to lead	Max.20	/W
	ja	junction to ambient On alumina substrate	Max.76	
		junction to ambient On glass-epoxy substrate	Max.134	

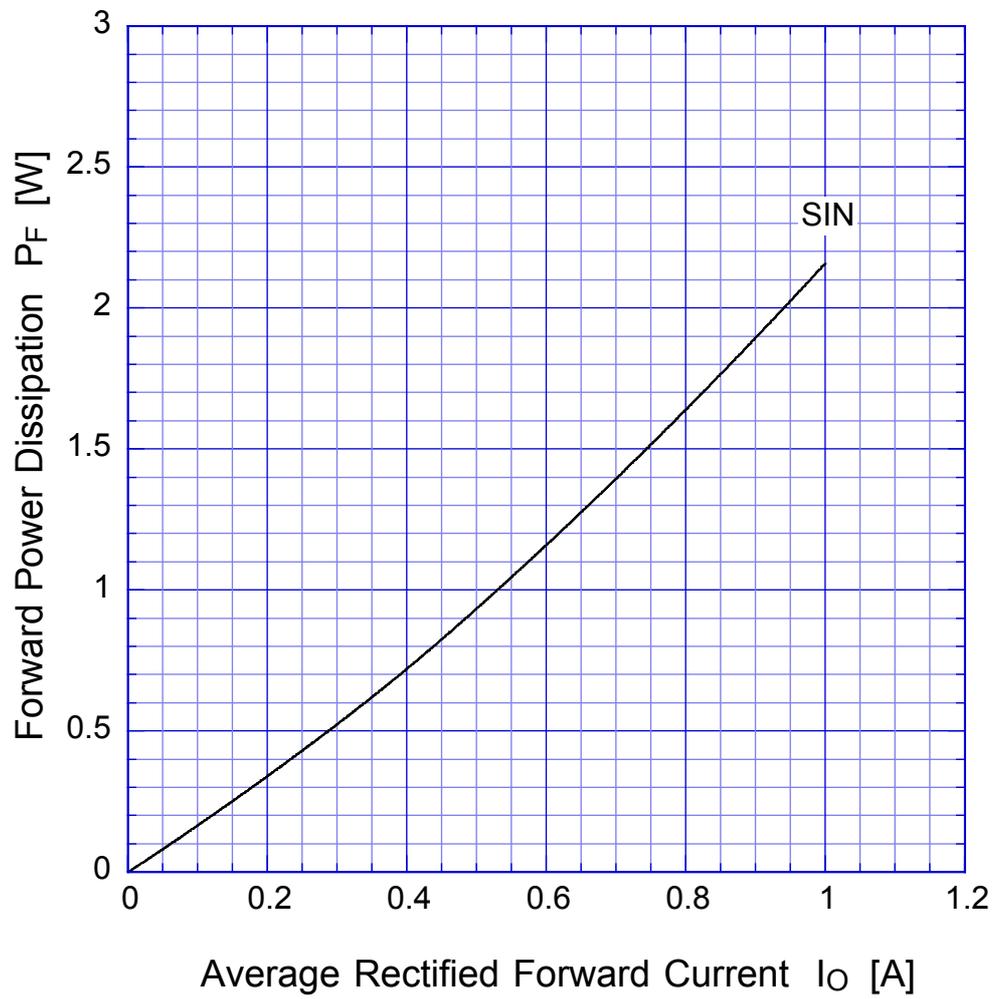
S1ZBx

Forward Voltage



S1ZBx

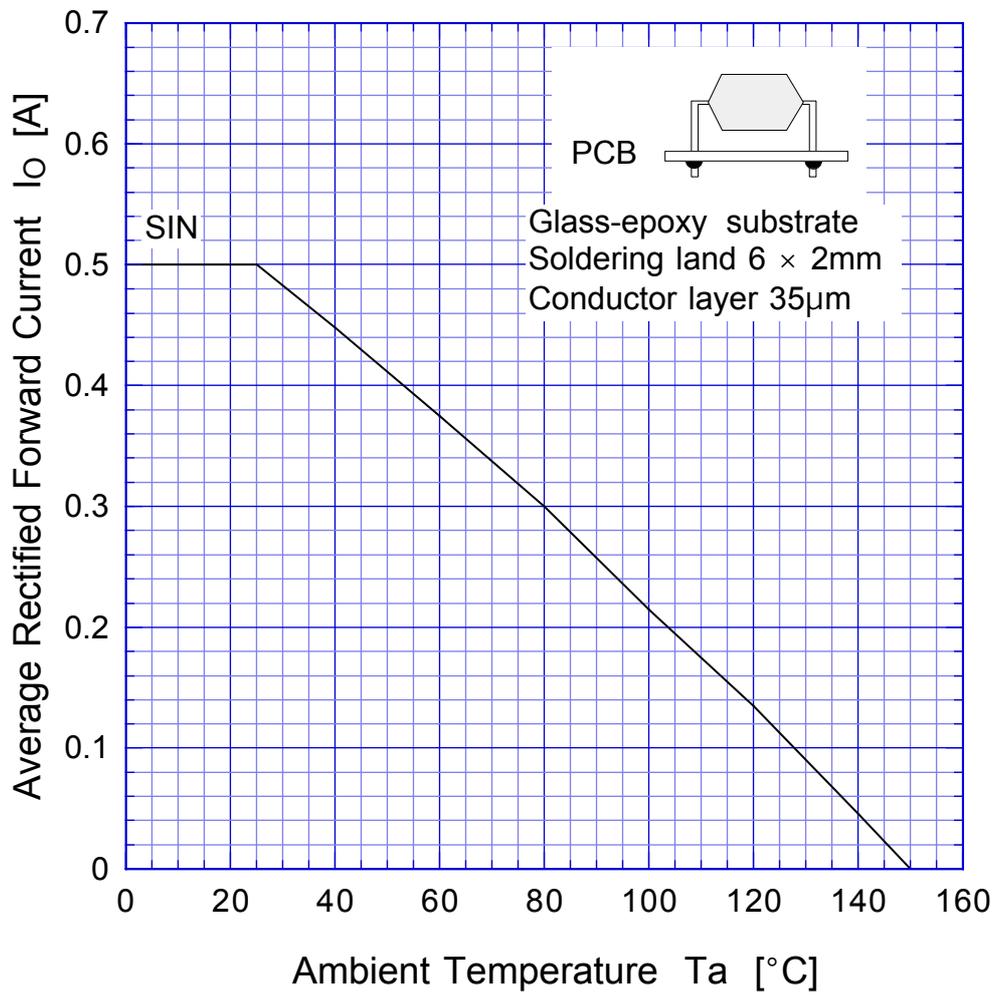
Forward Power Dissipation



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

# S1ZBx

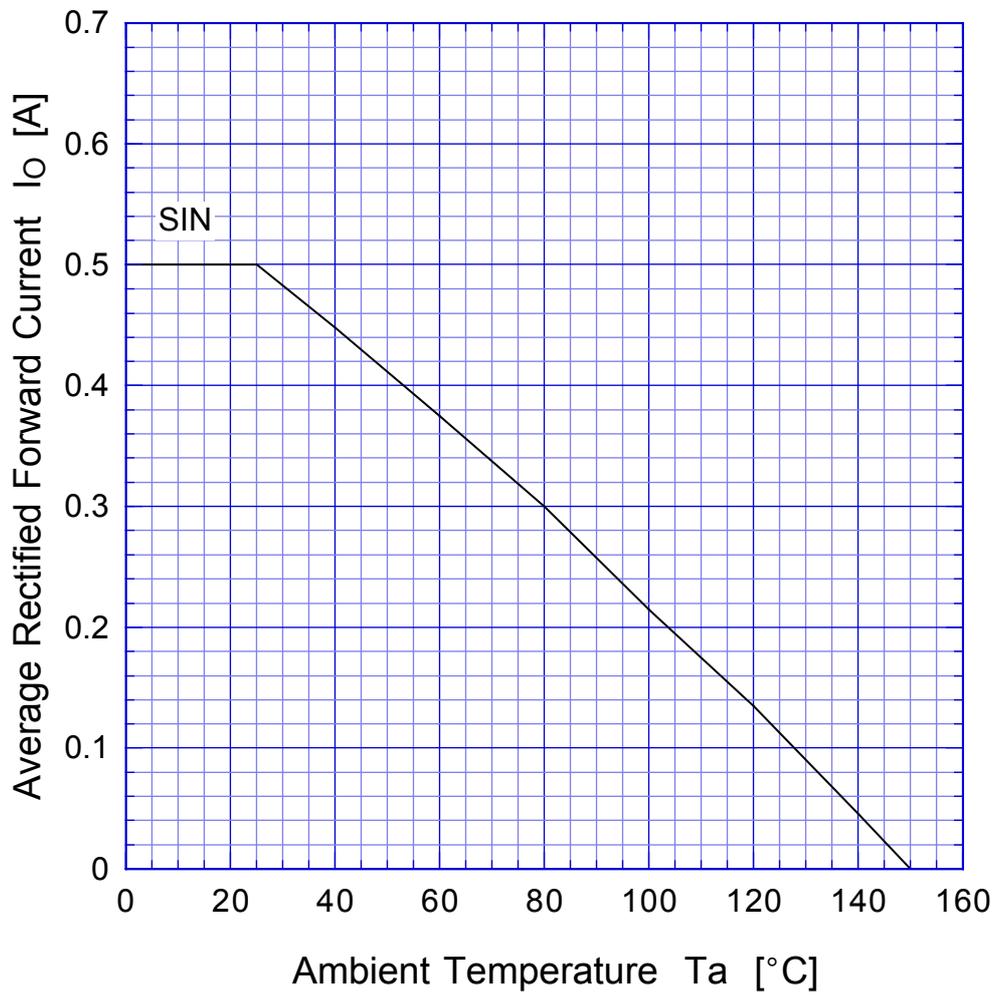
## Derating Curve



Sine wave  
R-load  
Free in air

# S1ZBx

## Derating Curve



Sine wave  
R-load  
Free in air

	Glass-epoxy	Alumina
Soldering land	1mm	1mm
Conductor layer	35 $\mu$ m	20 $\mu$ m
Substrate thickness		0.64mm

# S1ZBx

## Peak Surge Forward Capability

