

# SHINDENGEN

## General Purpose Rectifiers

## SMT Bridges

# S1ZB60

## 600V 0.8A

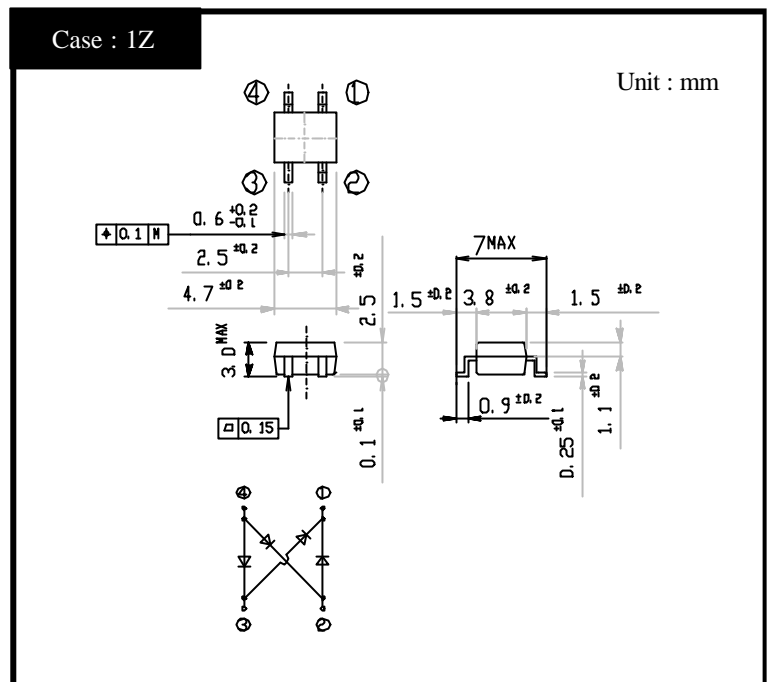
### FEATURES

- 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  $T_I=25$  )

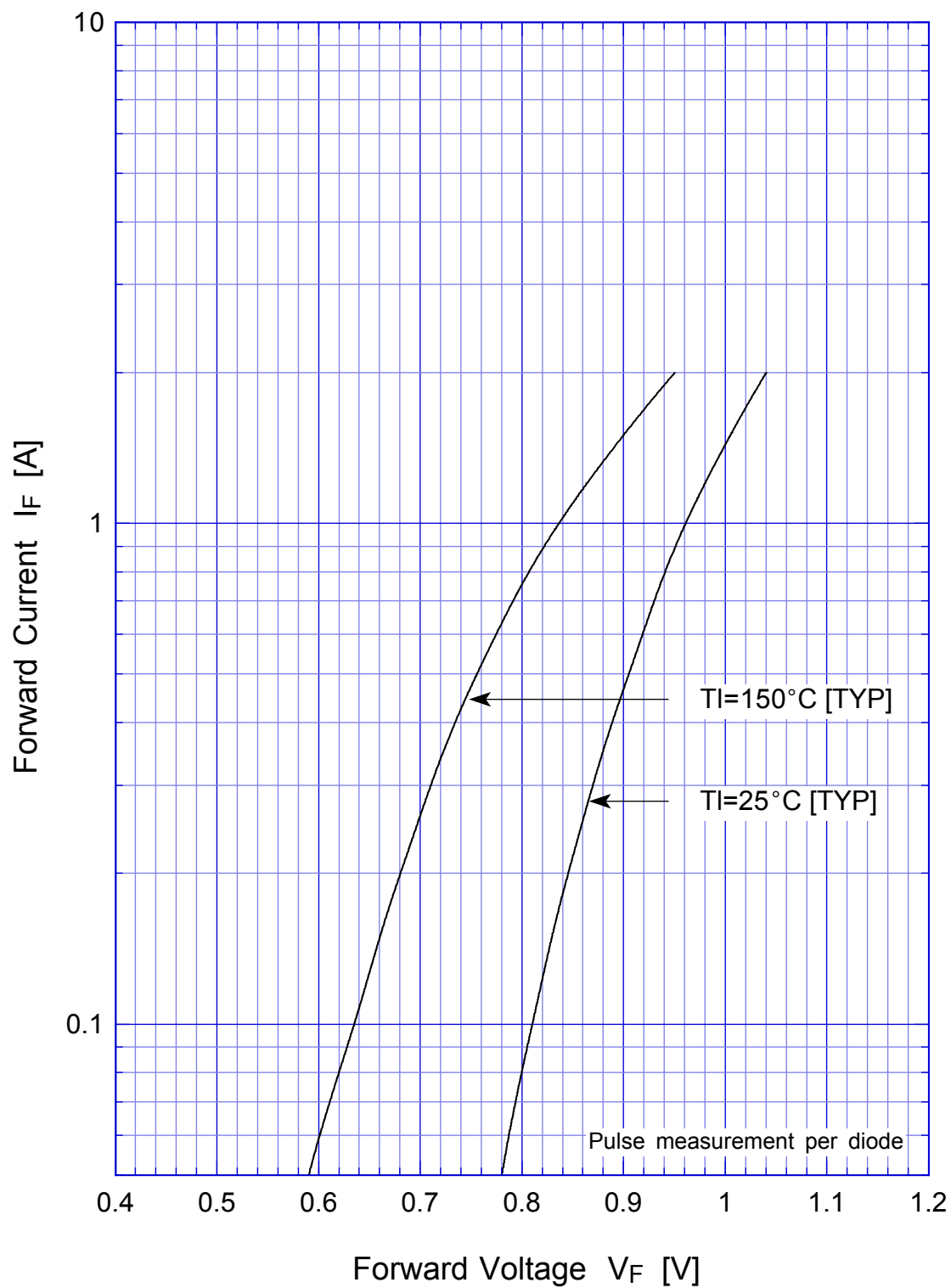
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		600	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load On alumina substrate $T_a=25$	0.8	A
		50Hz sine wave, R-load On glass-epoxy substrate $T_a=25$	0.5	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25$	30	A
Current Squared Time	$I^2t$	1ms $t < 10ms$ $T_j=25$	4.5	$A^2s$

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=0.4A$ , Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.10	$\mu A$
Thermal Resistance	$\theta_j$	junction to lead	Max.20	
		junction to ambient On alumina substrate	Max.76	/W
		junction to ambient On glass-epoxy substrate	Max.134	

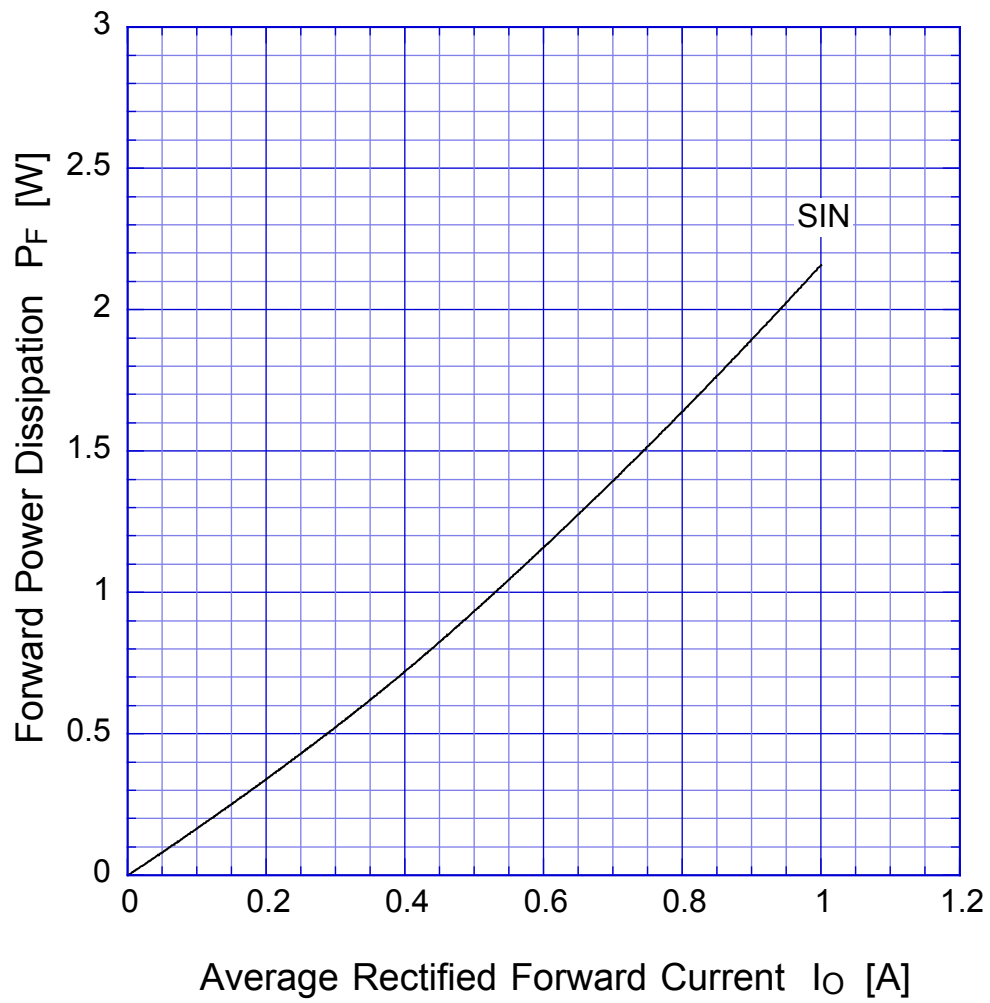
S1ZBx

Forward Voltage



S1ZBx

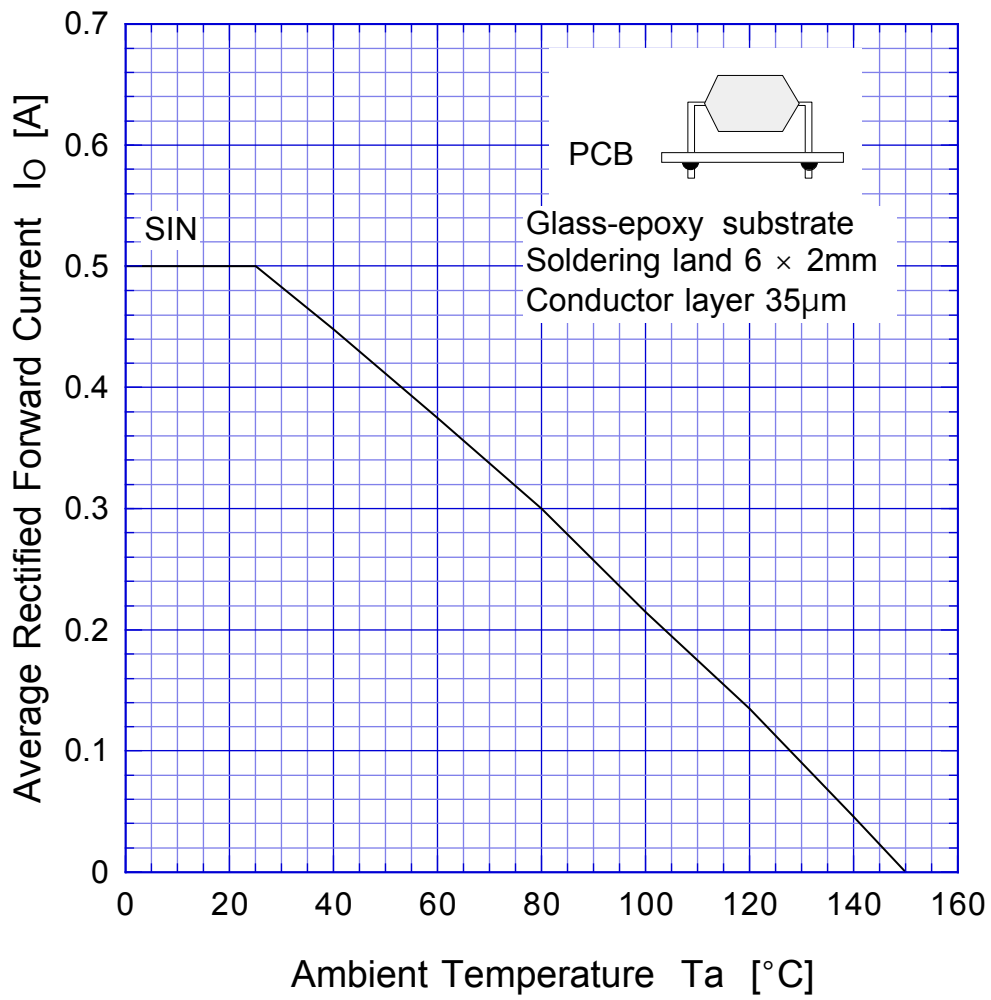
Forward Power Dissipation



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

# S1ZBx

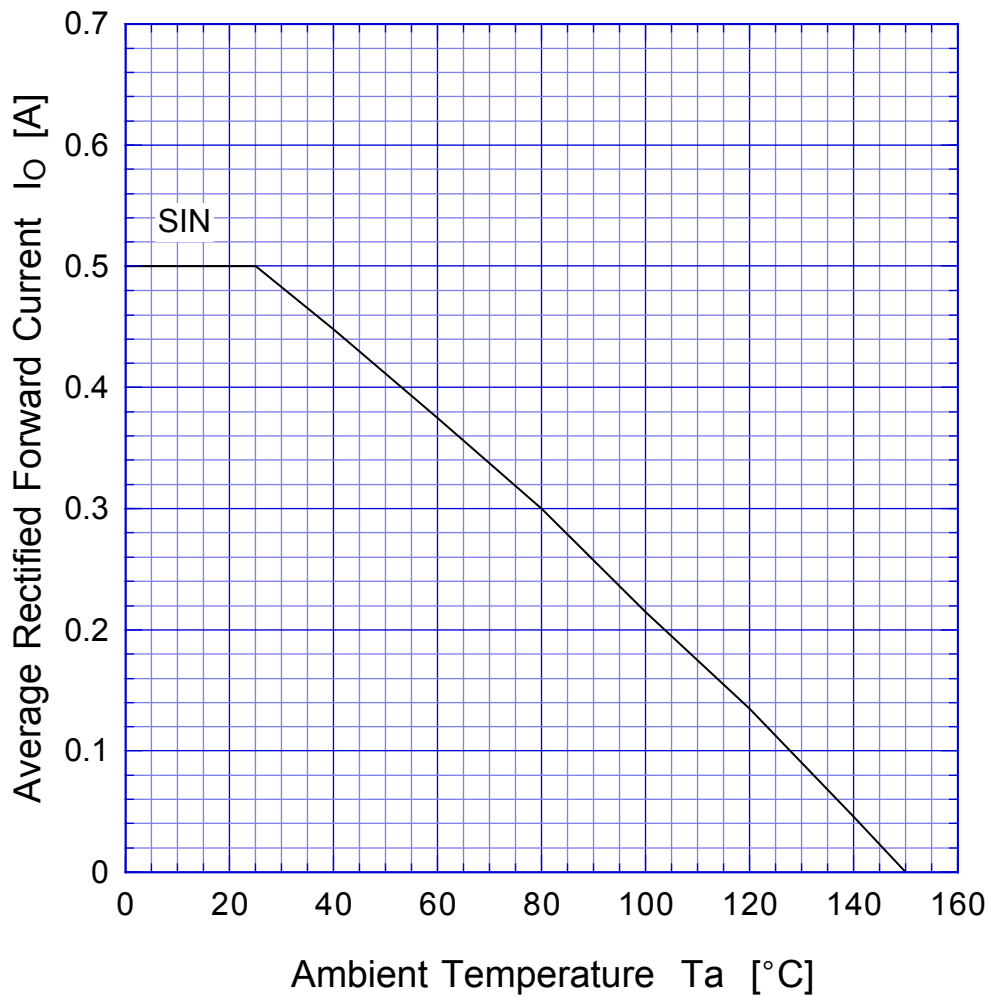
## Derating Curve



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

