

SHINDENGEN

General Purpose Rectifiers

SMT Bridges

S1ZB20

200V 0.8A

FEATURES

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

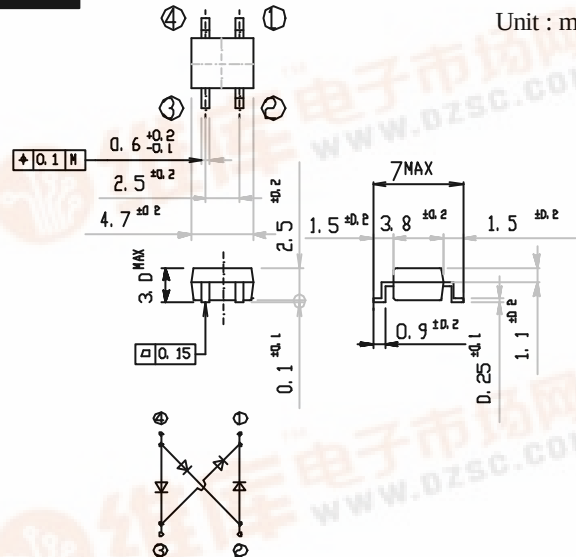
APPLICATION

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

OUTLINE DIMENSIONS

Case : 1Z

Unit : mm



RATINGS

● Absolute Maximum Ratings (If not specified $T_l=25^{\circ}\text{C}$)

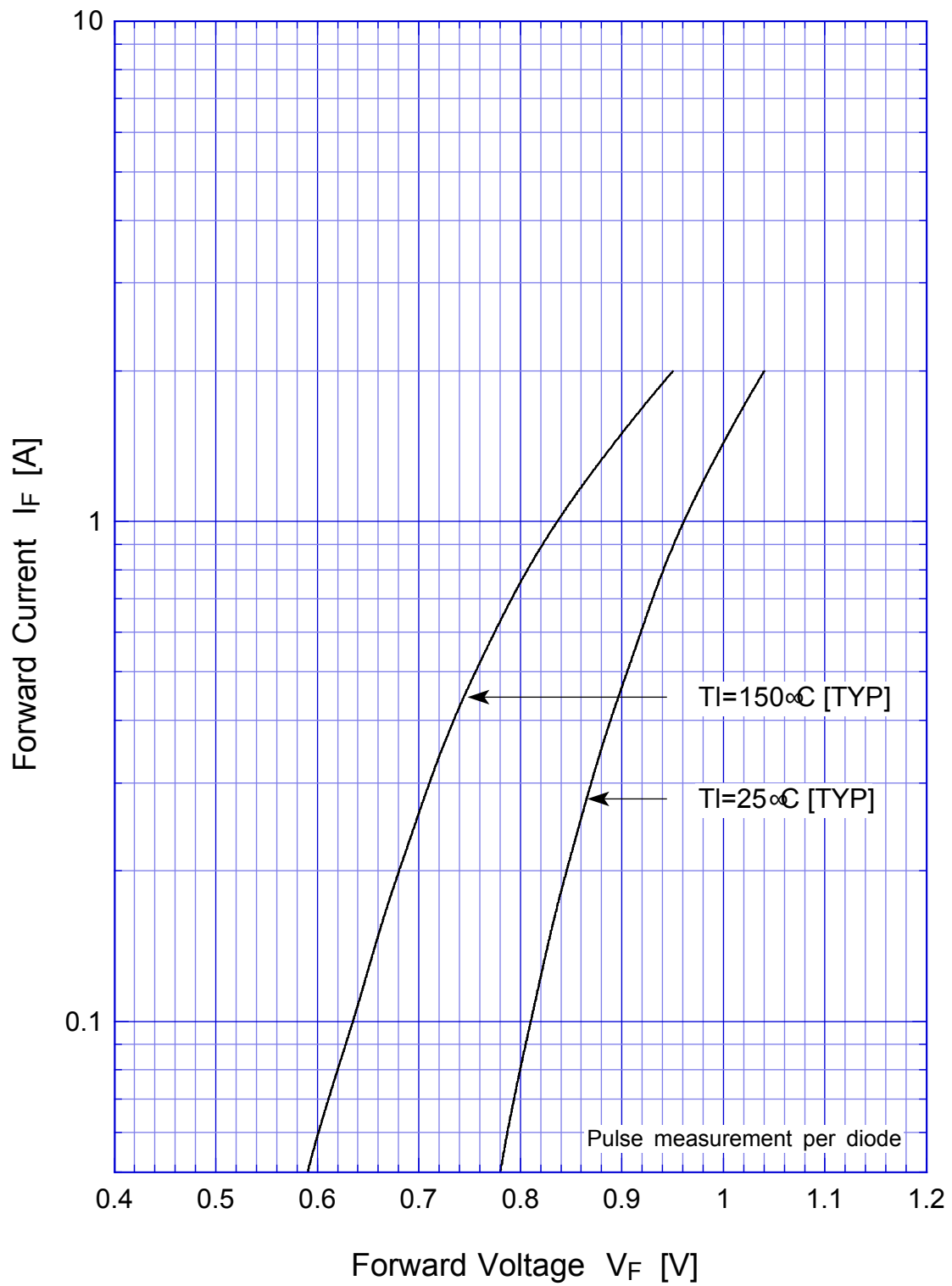
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^{\circ}\text{C}$
Operating Junction Temperature	T_j		150	$^{\circ}\text{C}$
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load On alumina substrate $T_a=25^{\circ}\text{C}$	0.8	A
		50Hz sine wave, R-load On glass-epoxy substrate $T_a=25^{\circ}\text{C}$	0.5	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^{\circ}\text{C}$	30	A
Current Squared Time	I^2t	$1\text{ms} \leq t < 10\text{ms}$ $T_j=25^{\circ}\text{C}$	4.5	A^2s

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=0.4\text{A}$, 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	μA
Thermal Resistance	θ_{jl}	junction to lead	Max.20	$^{\circ}\text{C/W}$
	θ_{ja}	junction to ambient On alumina substrate	Max.76	
	θ_{ja}	junction to ambient On glass-epoxy substrate	Max.134	

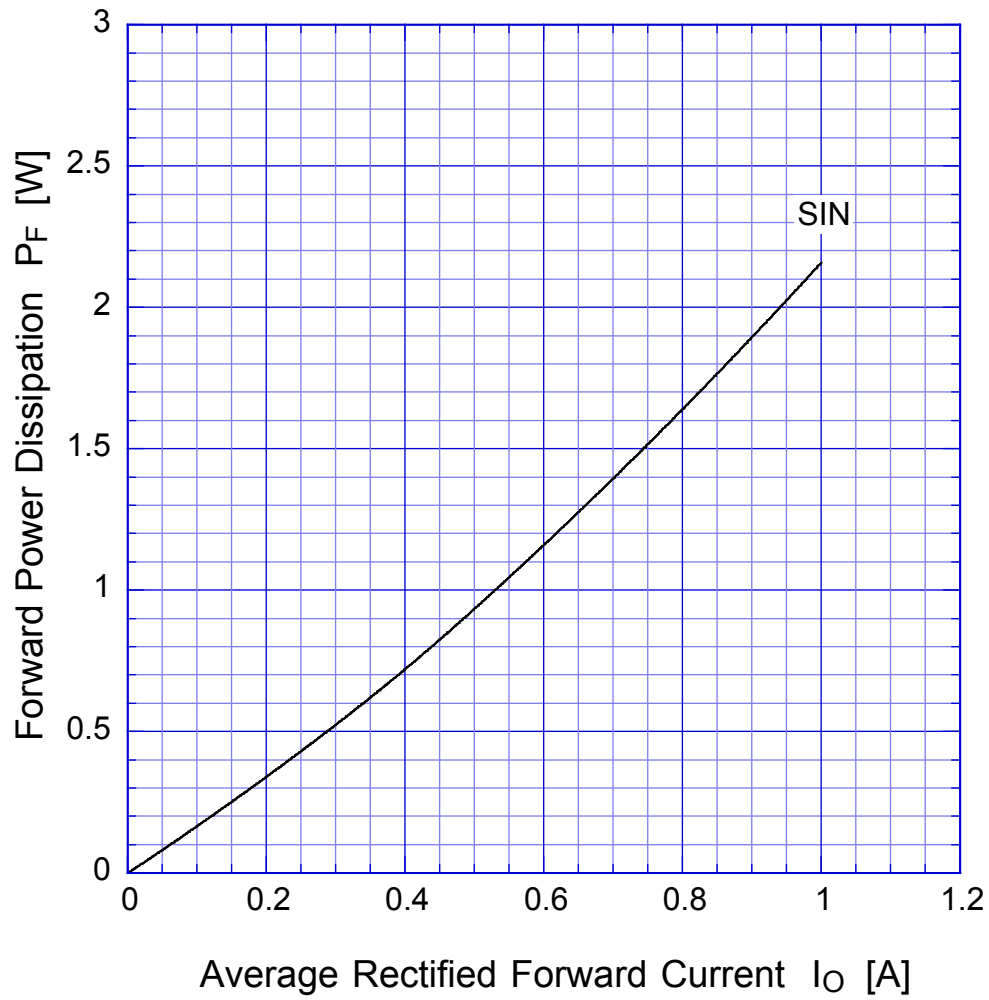
S1ZBx

Forward Voltage



S1ZBx

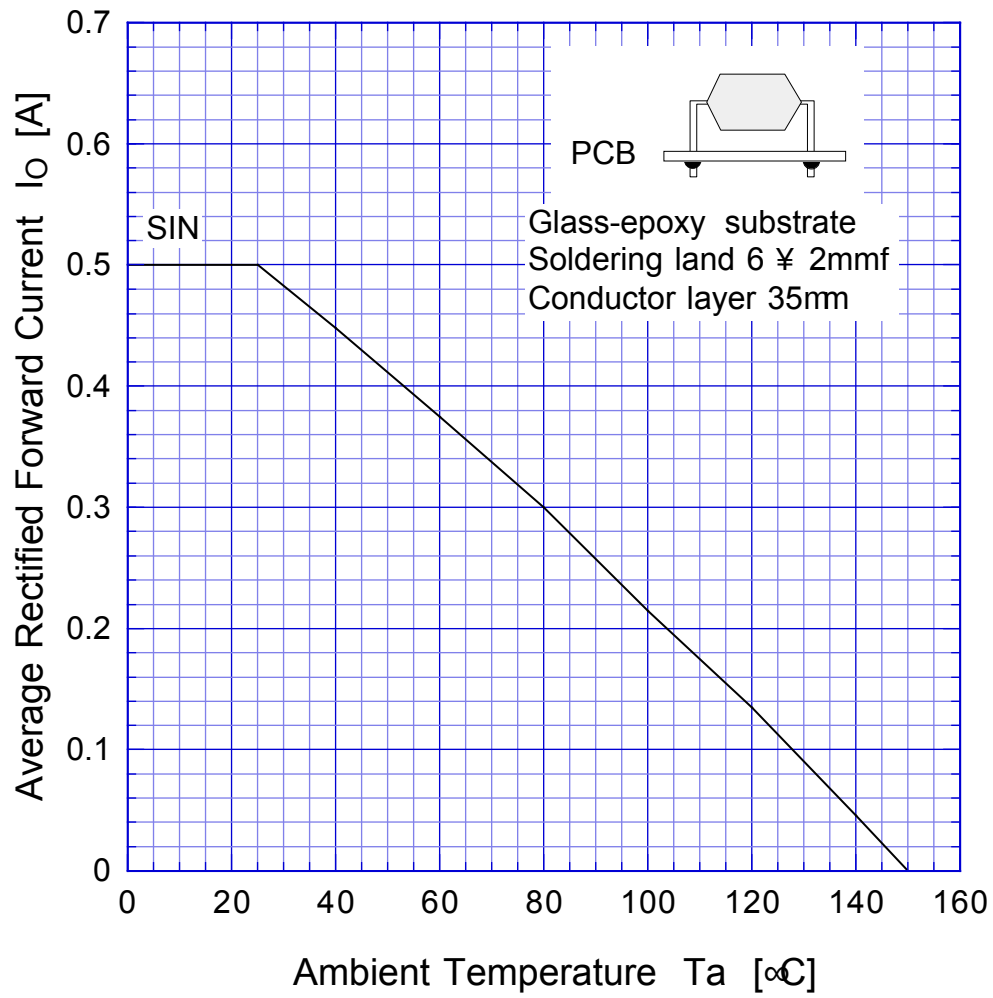
Forward Power Dissipation



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

S1ZBx

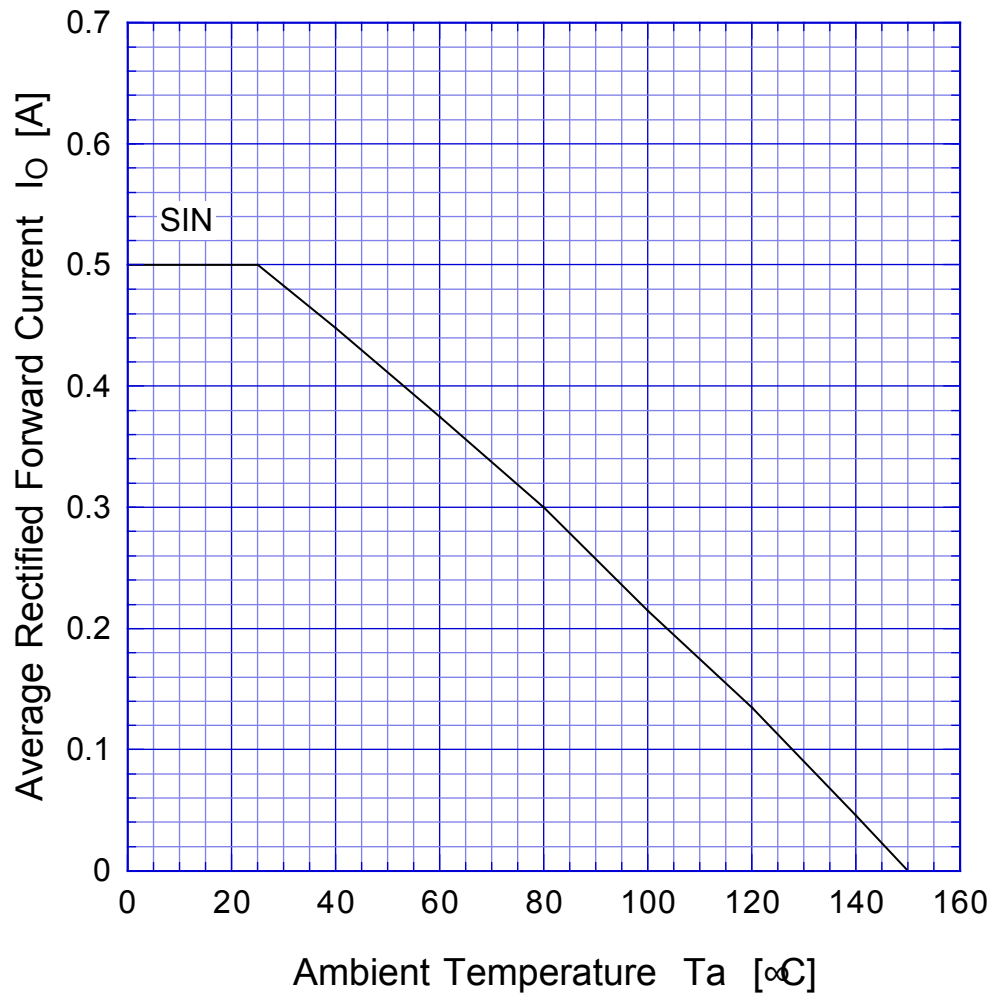
Derating Curve



Sine wave
R-load
Free in air

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Derating Curve



Sine wave
R-load
Free in air

	Glass-epoxy	Alumina
Soldering land	1mmf	1mmf
Conductor layer	35mm	20mm
Substrate thickness		0.64mm

S1ZBx

Peak Surge Forward Capability

