

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

S1VB20

200V 1A

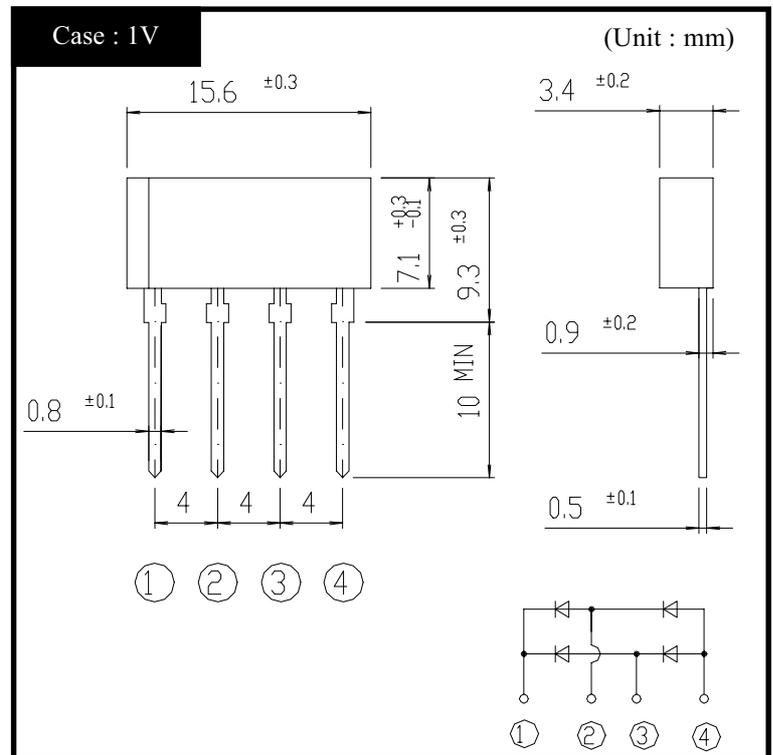
FEATURES

- Small Single In-Line (SIL) Package
- High IFSM
- Applicable to Automatic Insertion

APPLICATION

- Switching power supply
- Home Appliance, Office Equipment
- Telecommunication, Factory automation

OUTLINE DIMENSIONS



RATINGS

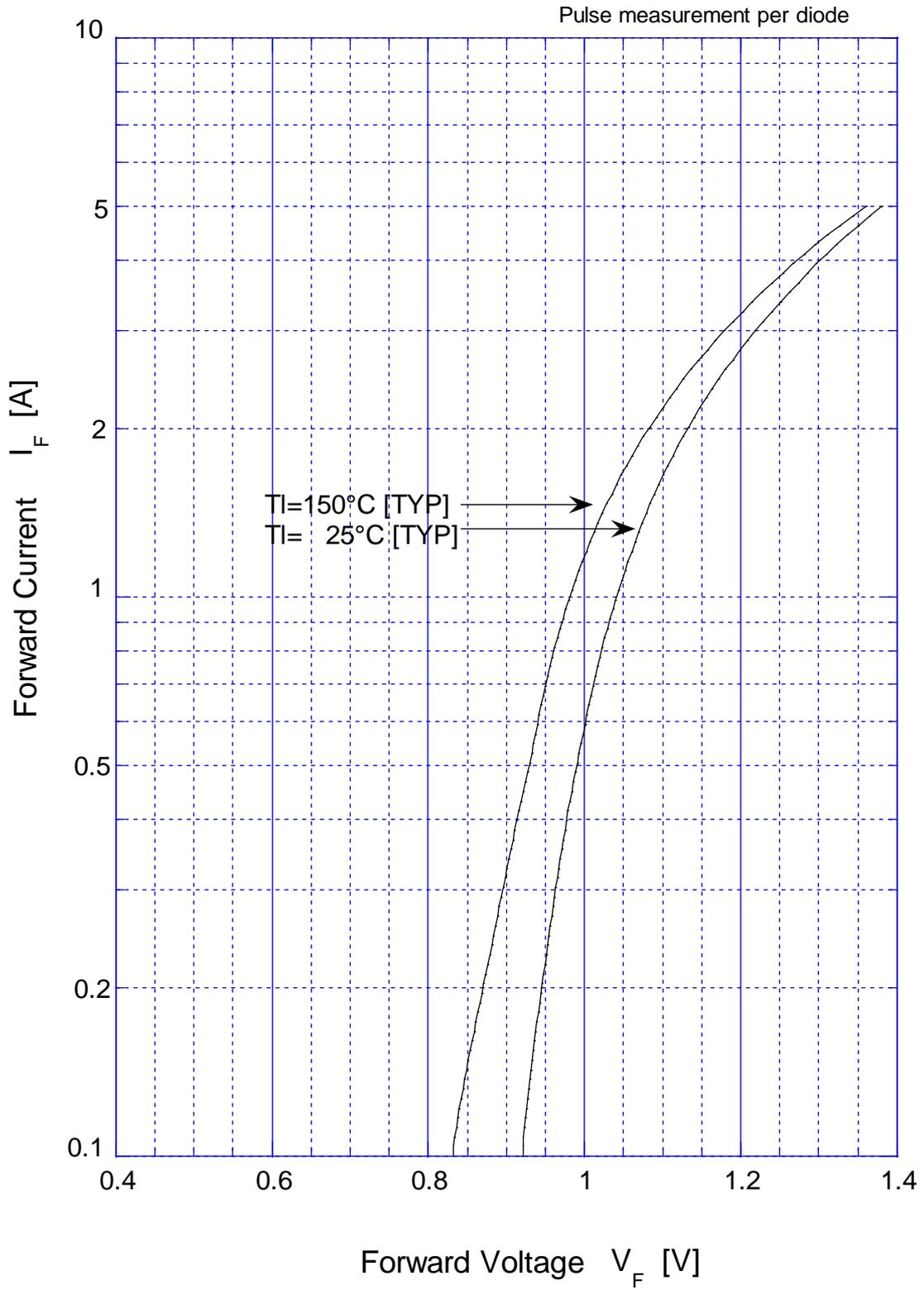
● Absolute Maximum Ratings (If not specified $T_i=25^\circ\text{C}$)

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, On glass-epoxy substrate $T_a=25^\circ\text{C}$	1	A
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

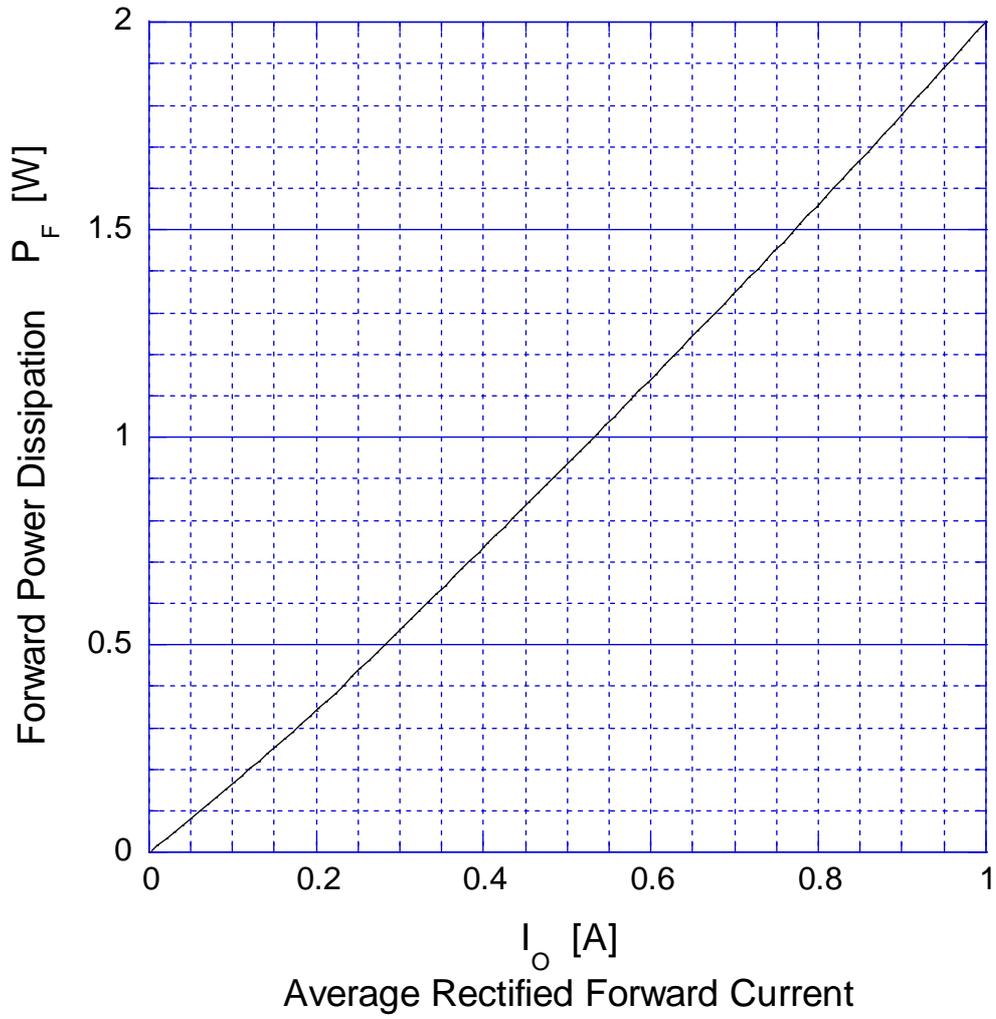
● Electrical Characteristics (If not specified $T_i=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=0.5\text{A}$, 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. 16	$^\circ\text{C}/\text{W}$
	θ_{ja}	junction to ambient	Max. 62	

S1VB Forward Voltage

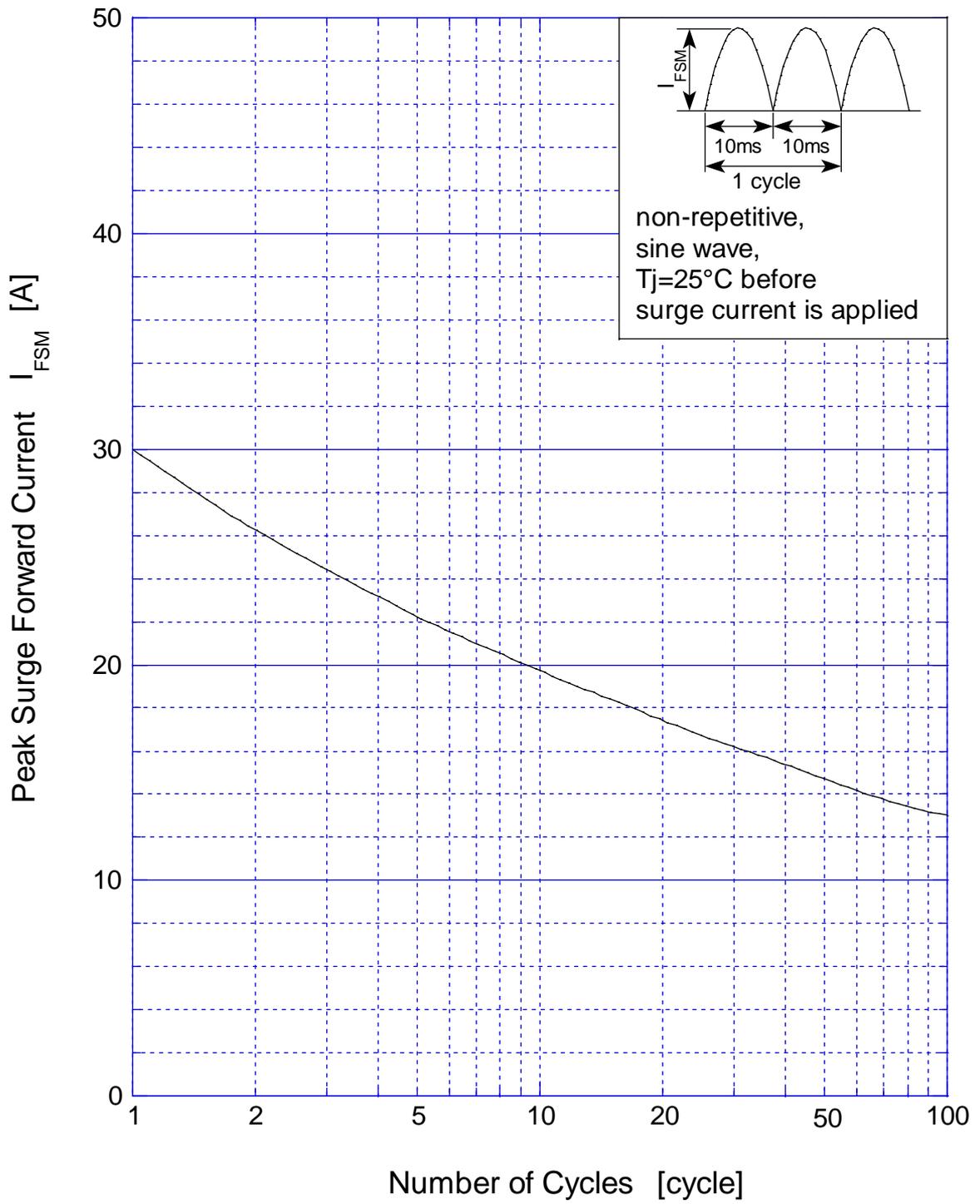


S1VB Forward Power Dissipation



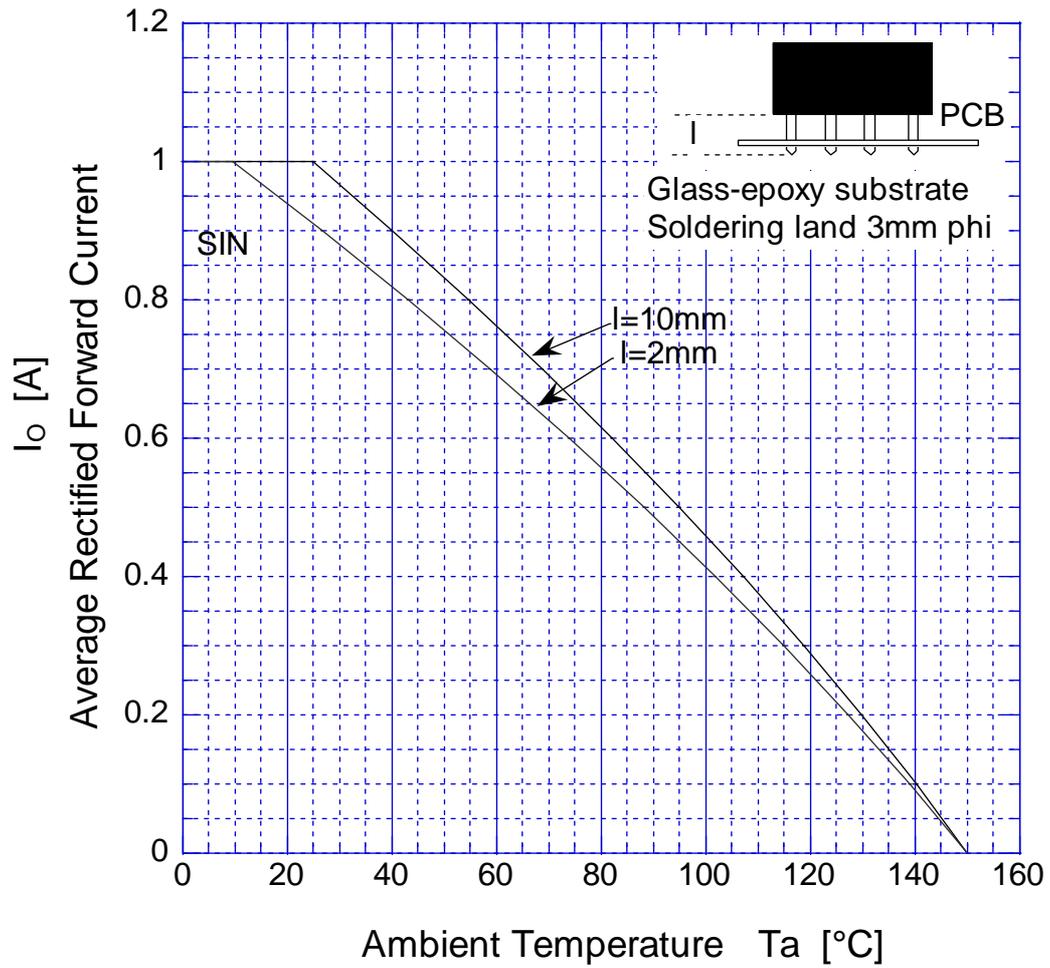
$T_j = 150^\circ\text{C}$
sine wave

S1VB Peak Surge Forward Capability



S1VB

Derating Curve



Sine wave
R - load
free in air