

SHINDENGEN

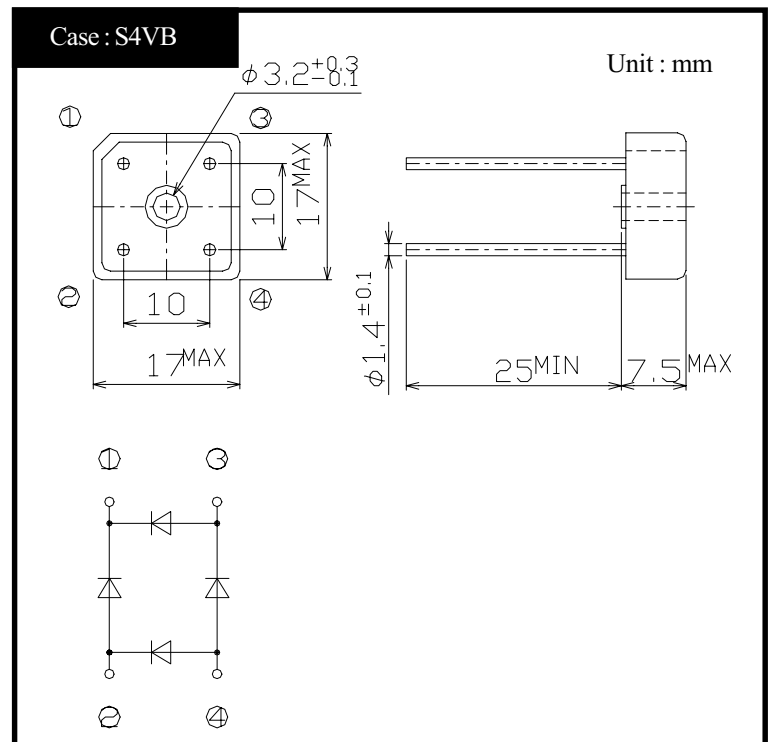
General Purpose Rectifiers

Square In-line Package

S4VB20

200V 4A

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings

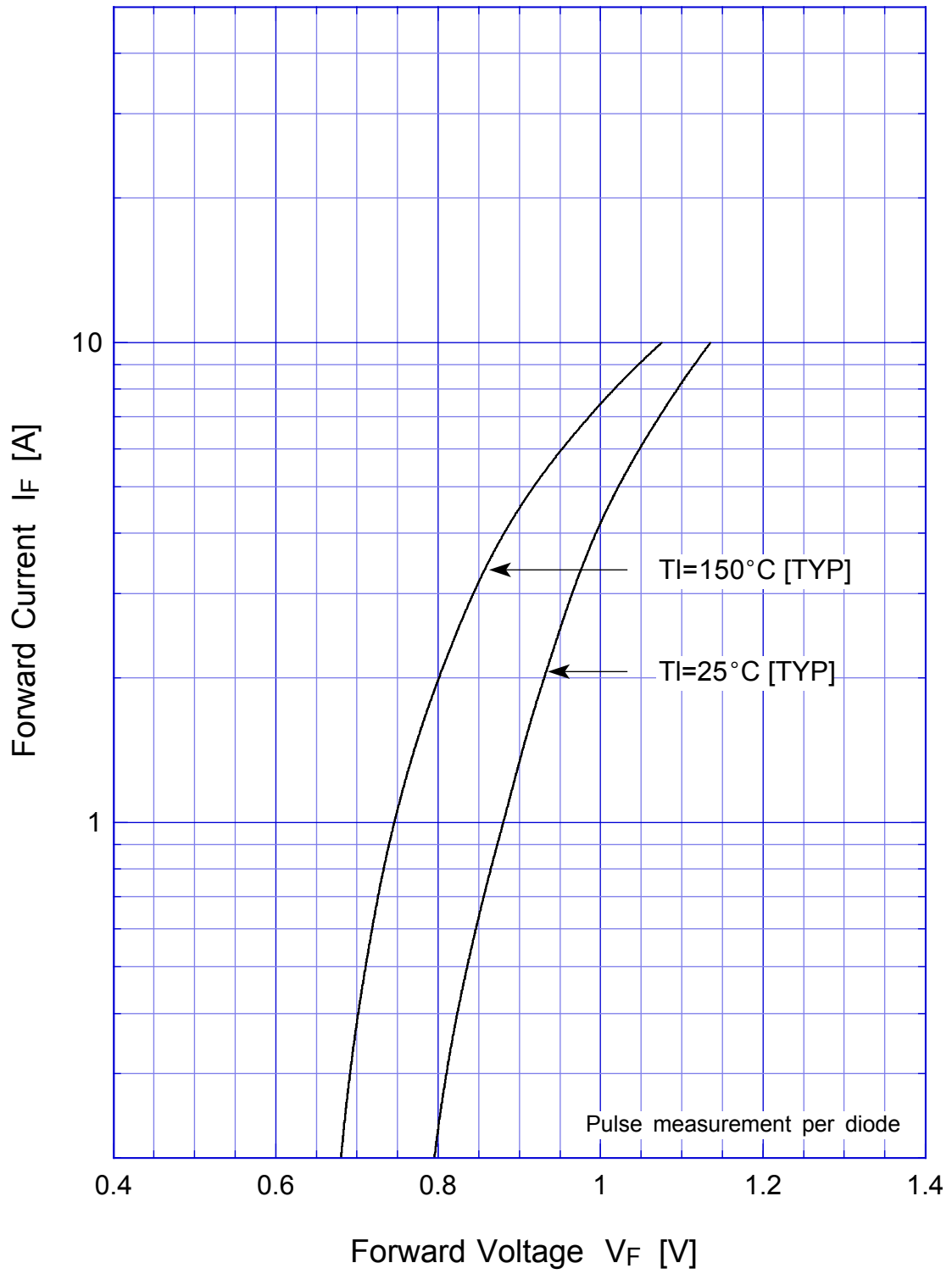
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	°C
Operating Junction Temperature	T_j		150	°C
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load, $T_a=40^\circ\text{C}$ With heatsink $\theta_{fa}=10^\circ\text{C/W}$	4	A
		50Hz sine wave, R-load, $T_a=40^\circ\text{C}$ Without heatsink	2.6	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	80	A
Current Squared Time	I^2t	$1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$	32	A^2s
Mounting Torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

● Electrical Characteristics ($T_l=25^\circ\text{C}$)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=2\text{A}$, 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.4.5	°C/W

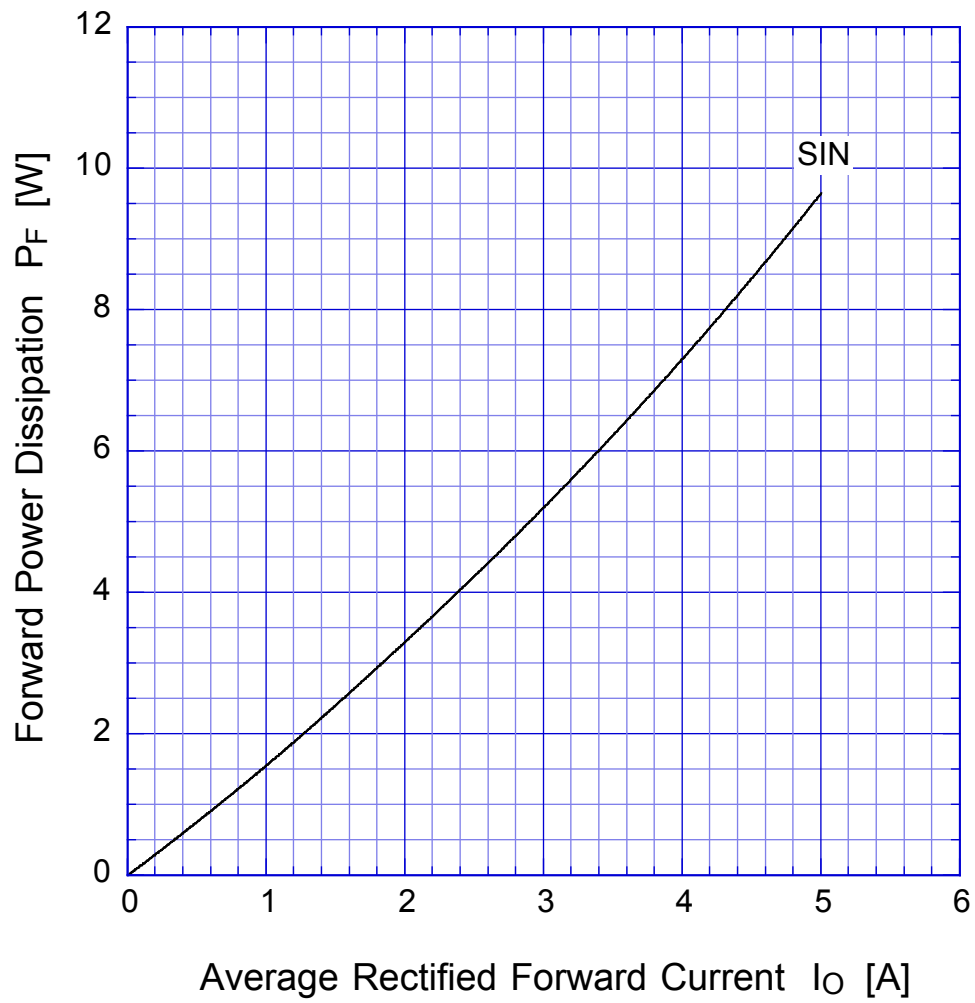
S4VBx

Forward Voltage



S4VBx

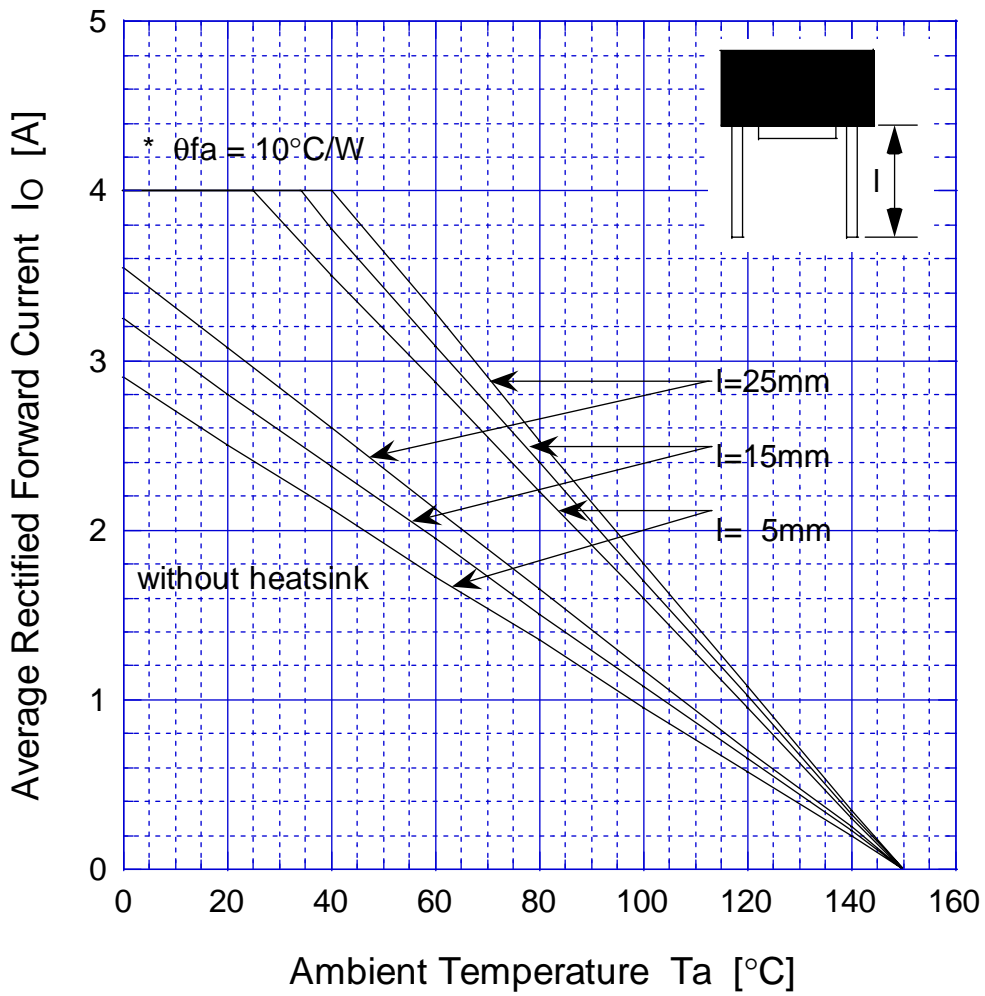
Forward Power Dissipation



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

S4VBx

Derating Curve



Sine wave

R-load

Free in air

* with thermal compound, TOR=0.3N-m

S4VBx

Peak Surge Forward Capability

