

SHINDENGEN

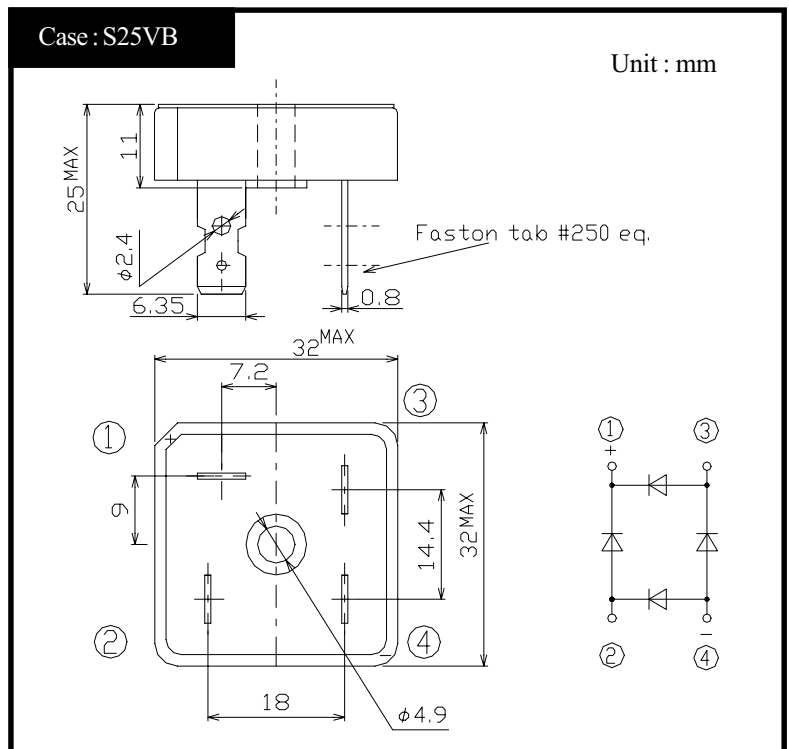
General Purpose Rectifiers

Square In-line Package

S25VB20

200V 25A

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings

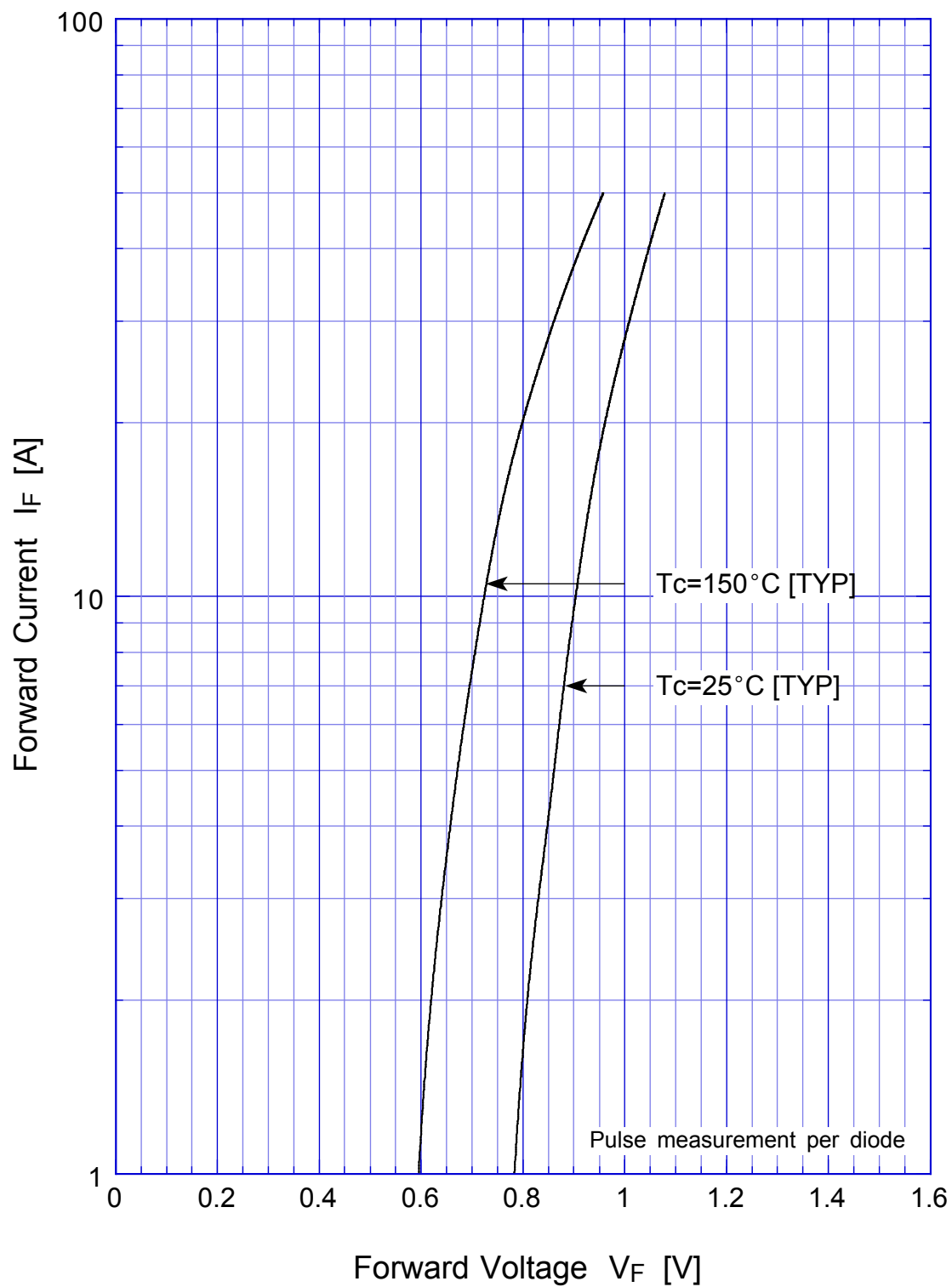
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	°C
Operating Junction Temperature	T_j		150	°C
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink, $T_c=85^\circ\text{C}$	25	A
		50Hz sine wave, R-load Without heatsink, $T_a=40^\circ\text{C}$	6	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	400	A
Current Squared Time	I^2t	$1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$	800	A^2s
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 1N·m)	2	N·m

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

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=12.5\text{A}$, 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_{jc}	junction to case	Max.1.5	°C/W

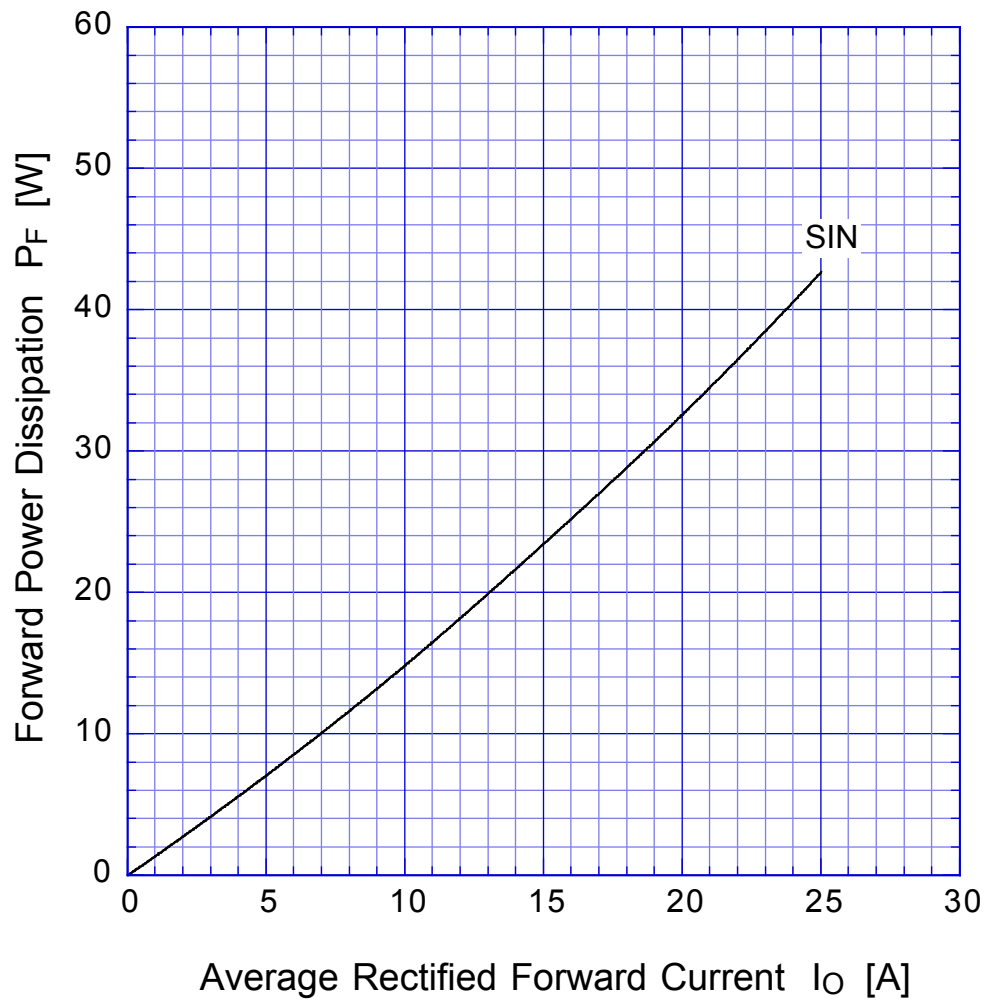
S25VBx

Forward Voltage



S25VBx

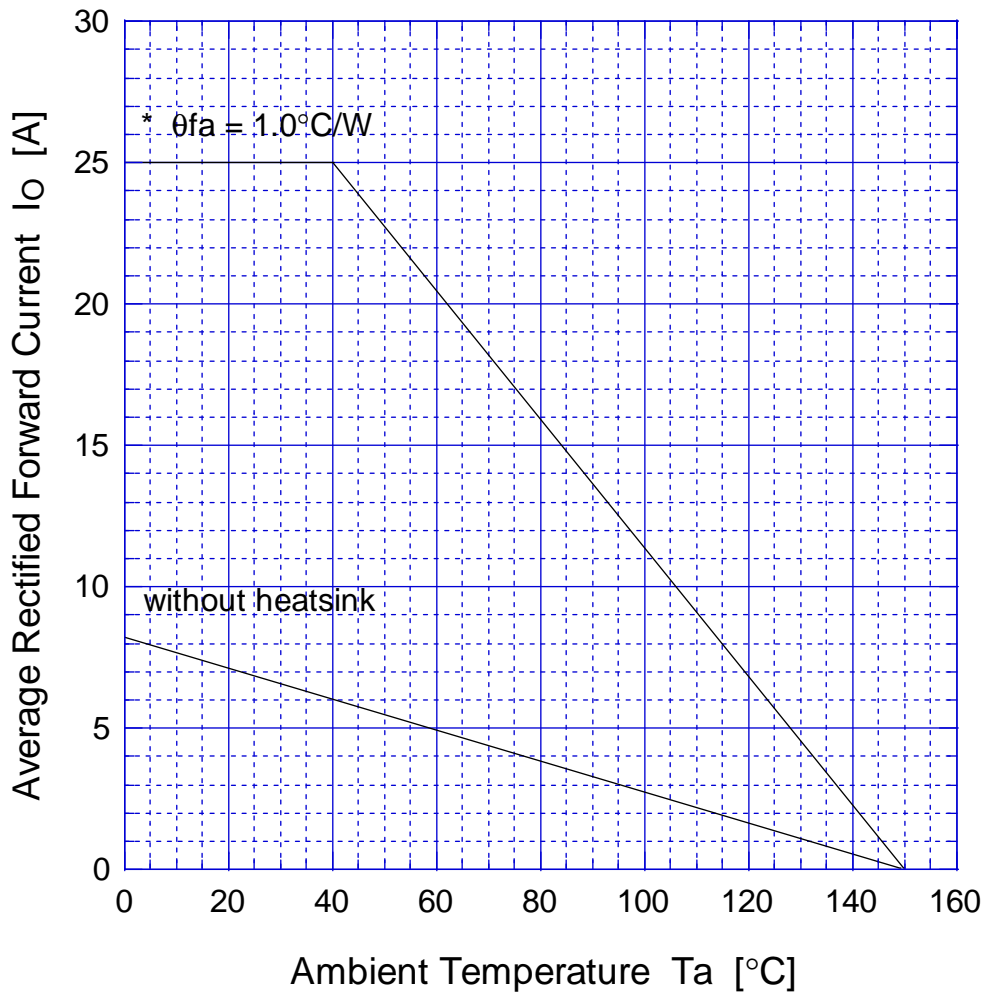
Forward Power Dissipation



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

S25VBx

Derating Curve



Sine wave

R-load

Free in air

* with thermal compound, TOR=1N-m

S25VBx

Peak Surge Forward Capability

