

# SHINDENGEN

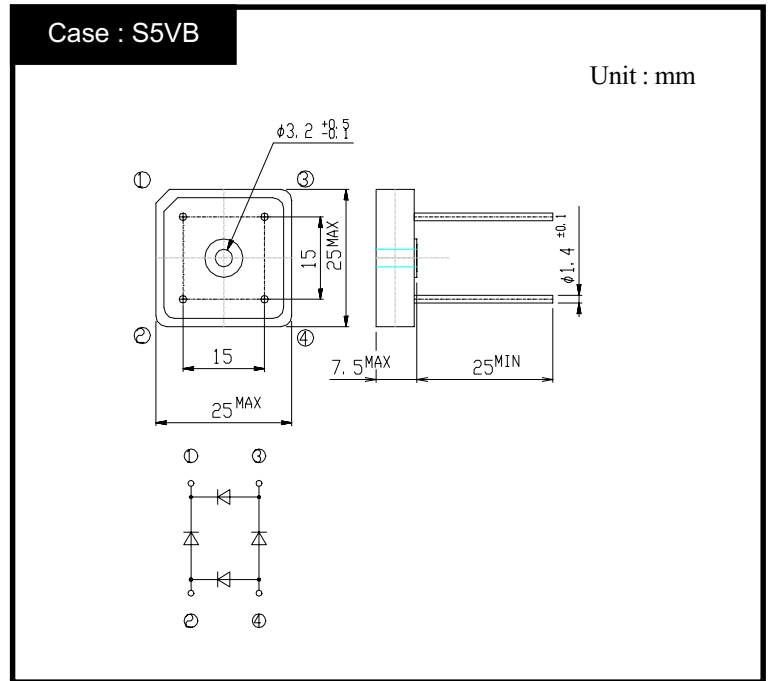
## General Purpose Rectifiers

Square In-line Package

# S5VB20

## 200V 6A

### OUTLINE DIMENSIONS



### RATINGS

#### ● Absolute Maximum Ratings

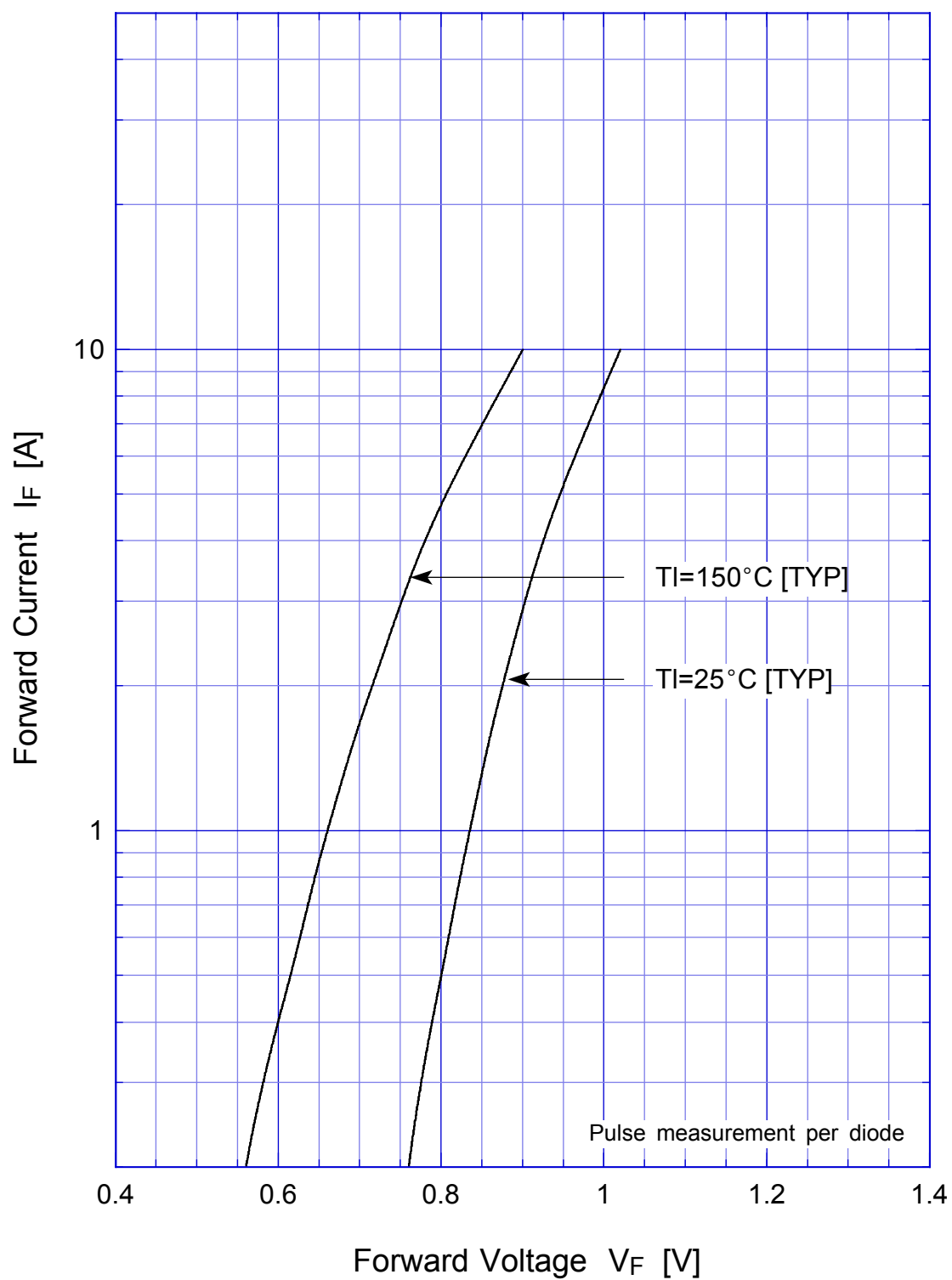
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-40~150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		200	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load, T <sub>a</sub> =40°C With heatsink θ <sub>fa</sub> =6.4°C/W	6	A
		50Hz sine wave, R-load, T <sub>a</sub> =40°C Without heatsink	3.5	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, T <sub>j</sub> =25°C	200	A
Current Squared Time	I <sup>2</sup> t	2ms ≤ t < 10ms T <sub>j</sub> =25°C	150	A <sup>2</sup> s
Mounting Torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

#### ● Electrical Characteristics (T<sub>j</sub>=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =3A, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	θ <sub>jl</sub>	junction to lead	Max.3	°C/W

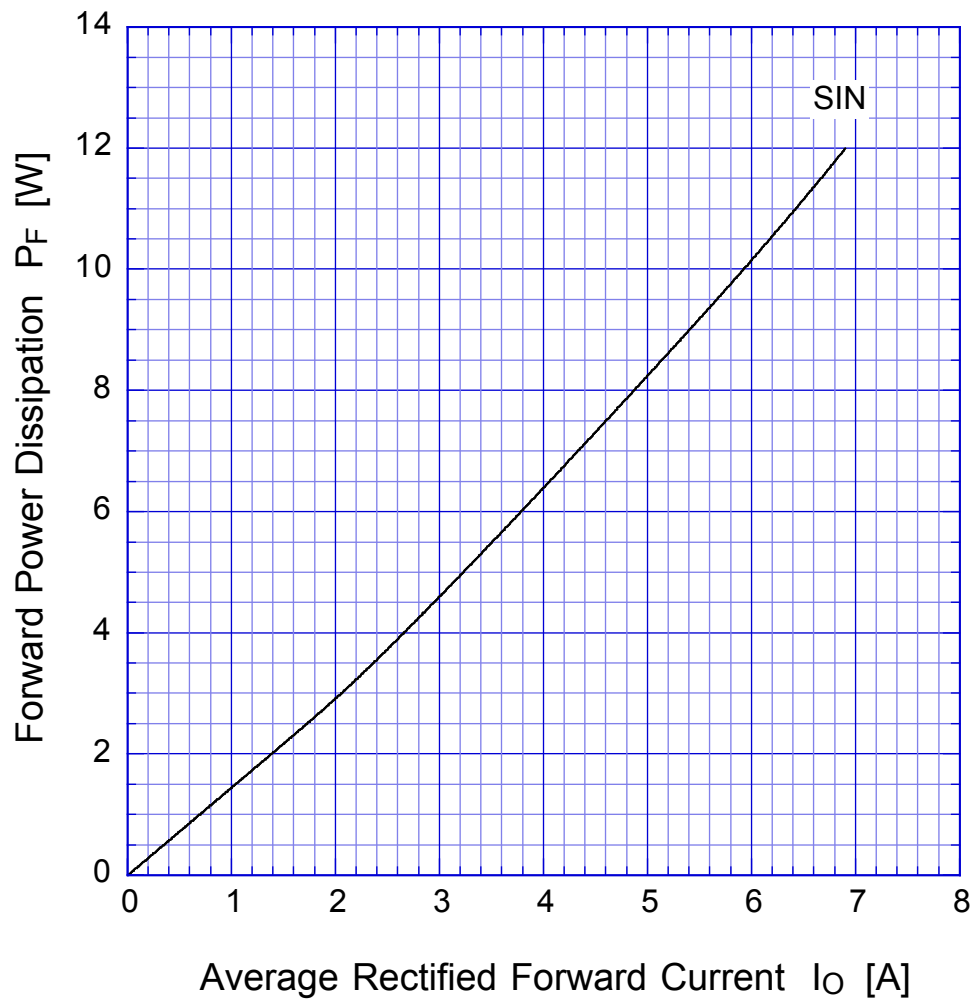
S5VBx

Forward Voltage



S5VBx

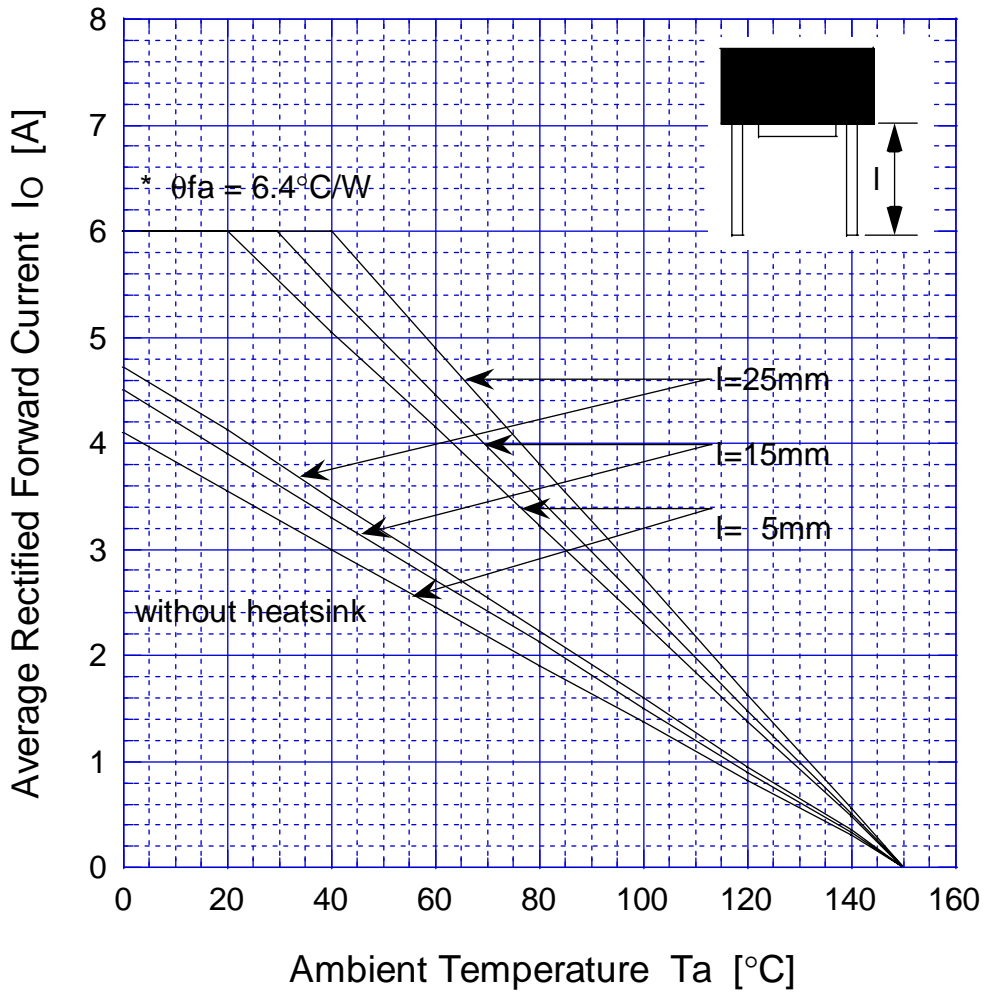
Forward Power Dissipation



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

# S5VBx

# Derating Curve



Sine wave

R-load

Free in air

\* with thermal compound, TOR=0.5N-m

# S5VBx

## Peak Surge Forward Capability

