

# SHINDENGEN

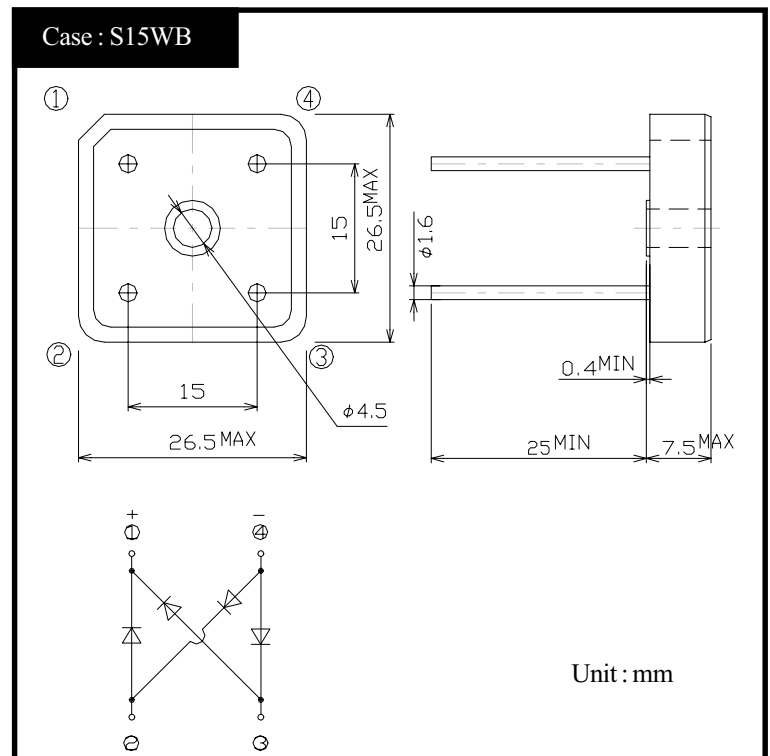
## General Purpose Rectifiers

SQ.I.P. Bridges

# S15WB20

## 200V 15A

### OUTLINE DIMENSIONS



### RATINGS

#### ● Absolute Maximum Ratings

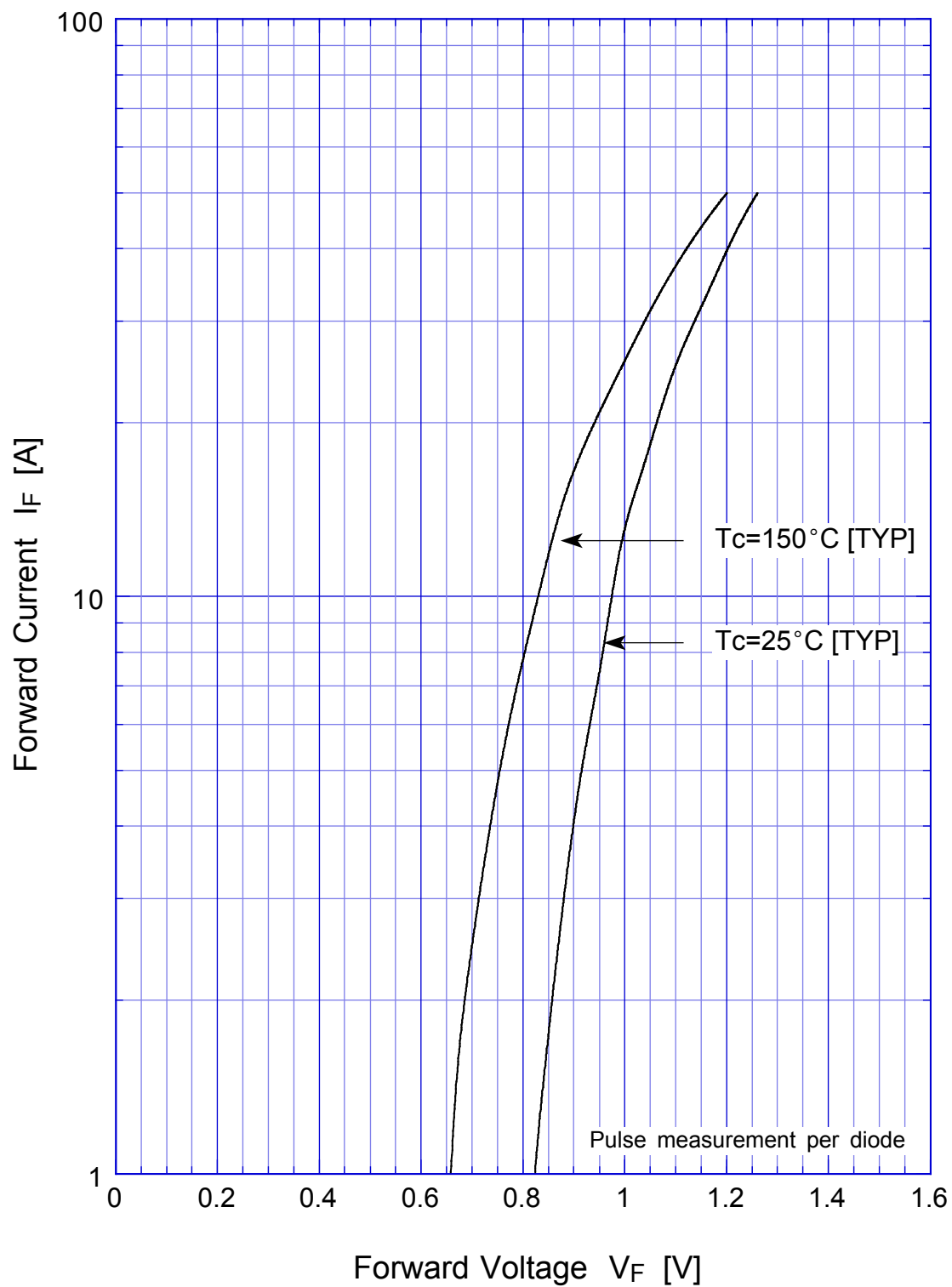
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40~150	°C
Operating Junction Temperature	$T_j$		150	°C
Maximum Reverse Voltage	$V_{RM}$		200	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load With heatsink $T_c=77^\circ\text{C}$	15	A
		50Hz sine wave, R-load Without heatsink $T_a=25^\circ\text{C}$	4	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	200	A
Current Squared Time	$I^2t$	$1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$	200	$\text{A}^2\text{s}$
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 1N·m)	2	N·m

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

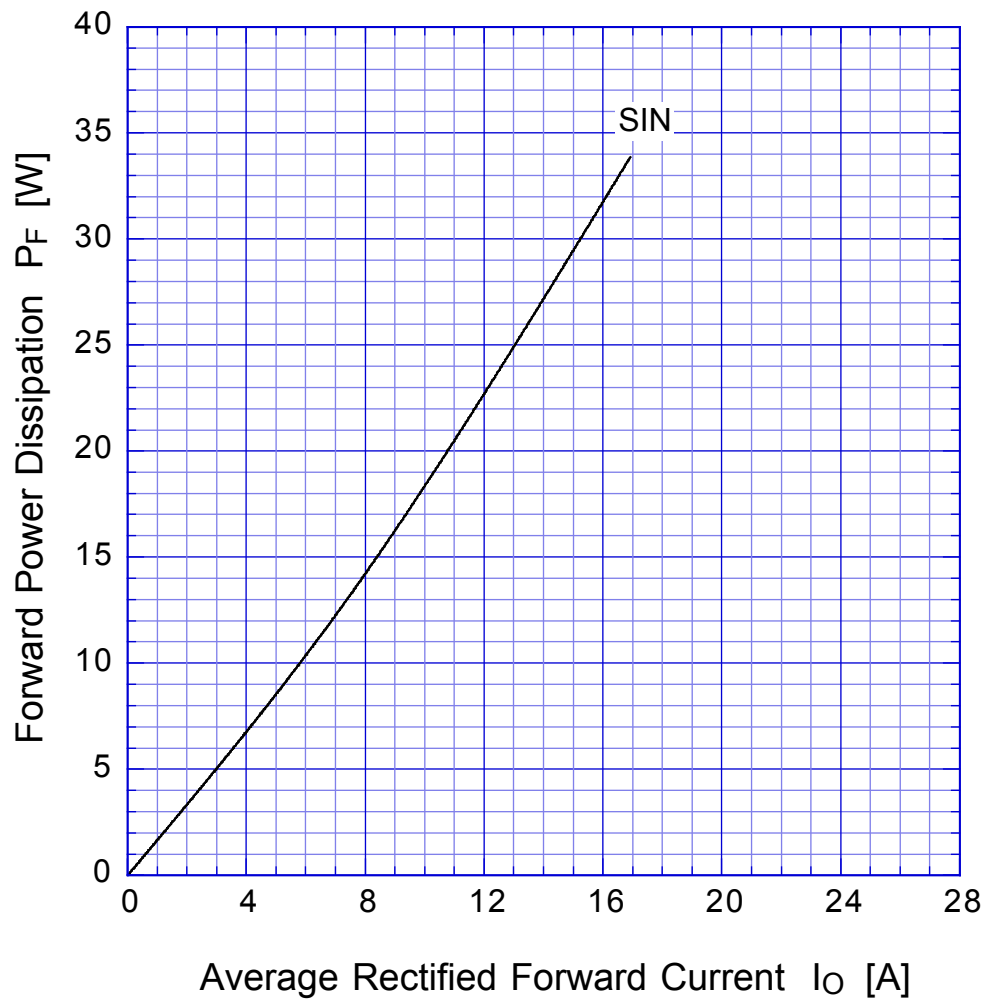
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=7.5\text{A}$ , Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.10	$\mu\text{A}$
Thermal Resistance	$\theta_{jc}$	junction to case	Max.2.5	°C/W
	$\theta_{jl}$	junction to lead	Max.2	
	$\theta_{ja}$	junction to ambient	Max.19	

S15WBx

Forward Voltage



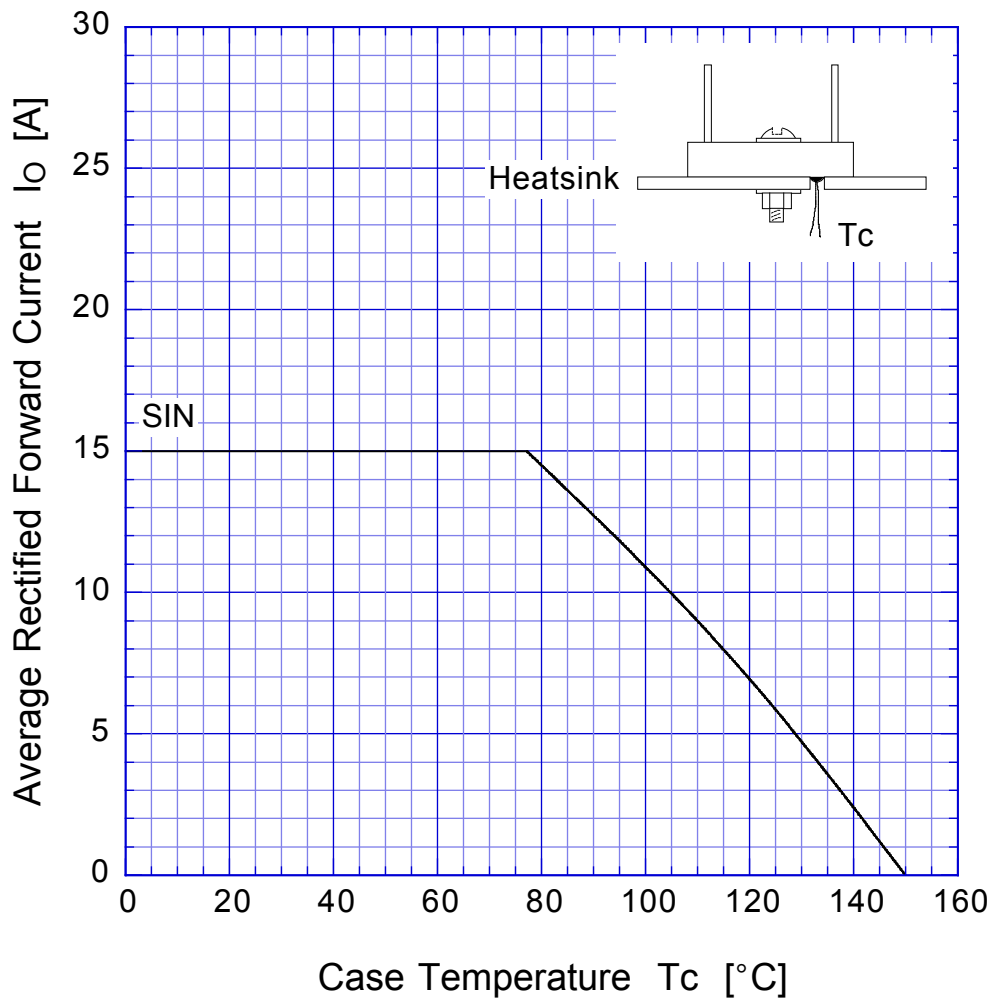
## S15WBx Forward Power Dissipation



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

# S15WBx

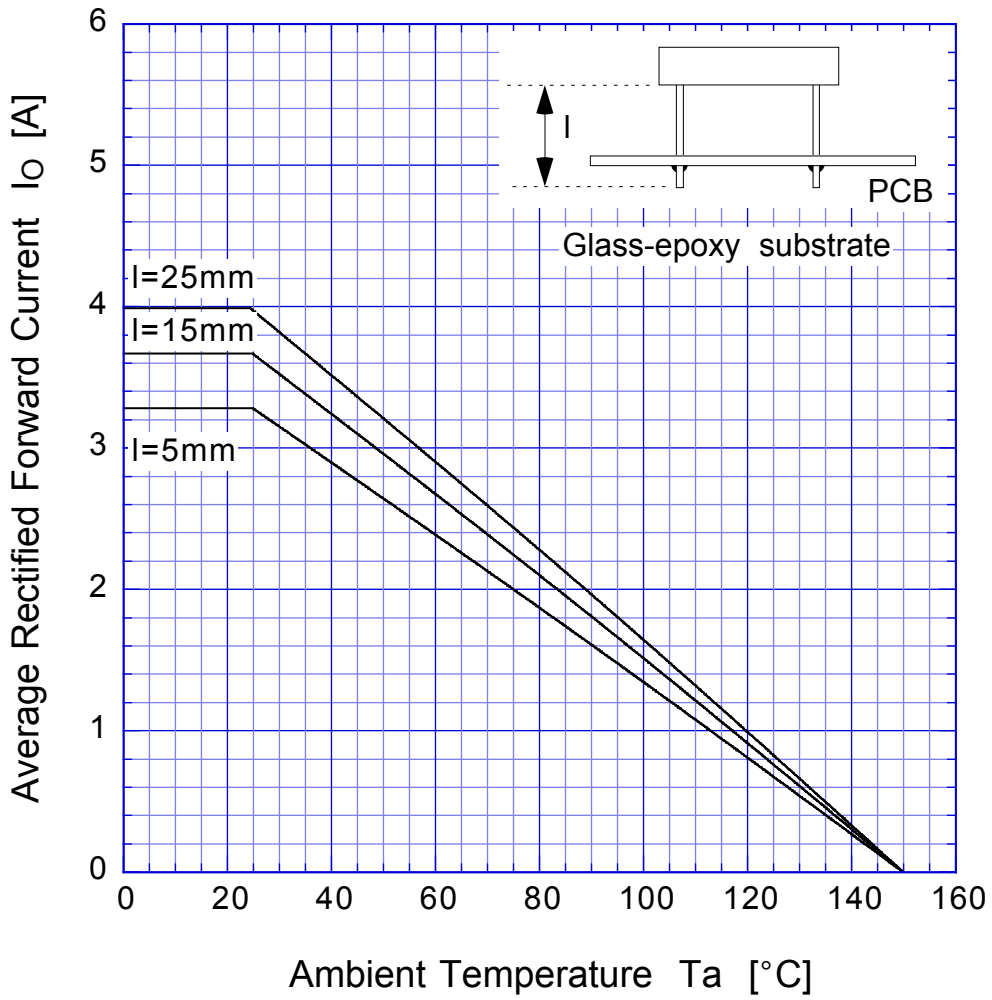
# Derating Curve



Sine wave  
R-load  
with heatsink

# S15WBx

# Derating Curve



Sine wave  
R-load  
Free in air

# S15WBx

## Peak Surge Forward Capability

