

# SHINDENGEN

## Bridge Diode

## Square In-line Package

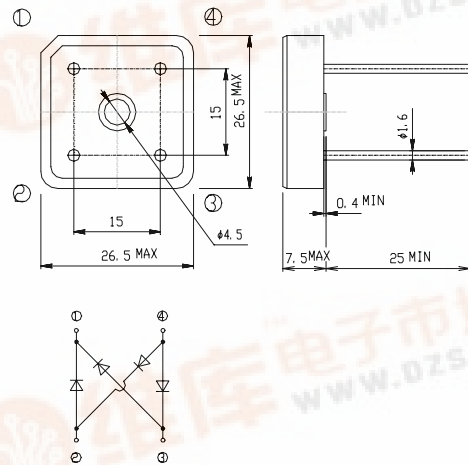
# S15WB60

## 600V 15A

### OUTLINE DIMENSIONS

Case : S15WB

Unit : mm



### 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>		600	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load With heatsink T <sub>c</sub> =77°C	15	A
		50Hz sine wave, R-load Without heatsink Ta=25°C	4	
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	1ms ≤ t < 10ms T <sub>c</sub> =25°C	200	A <sup>2</sup> s
Dielectric Strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque : 1N·m)	2	N·m

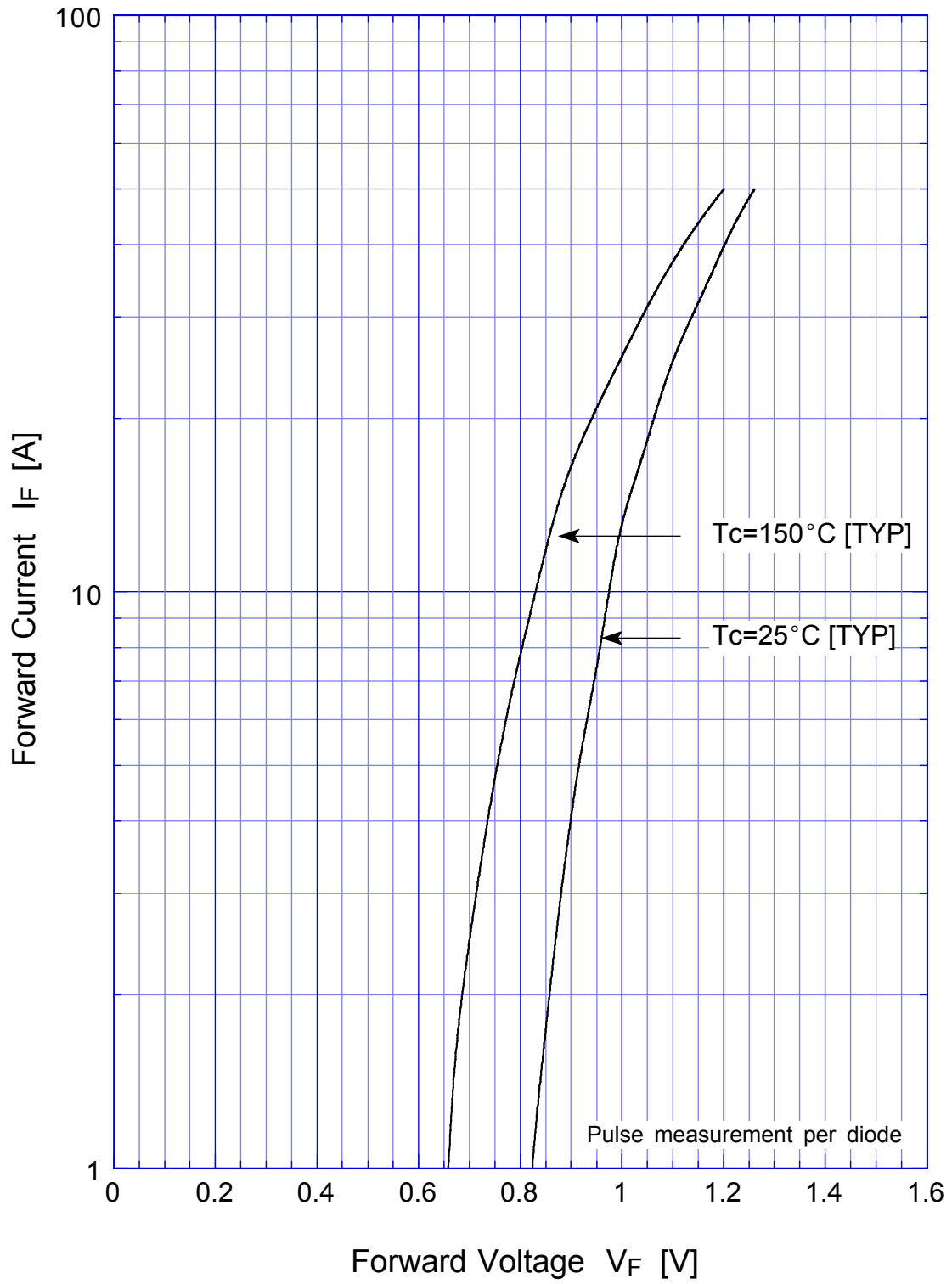
#### Electrical Characteristics (If not specified T<sub>c</sub>=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =7.5A, 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>jc</sub>	junction to case	Max.2.5	°C/W
	θ <sub>jl</sub>	junction to lead	Max.2	
	θ <sub>ja</sub>	junction to ambient	Max.19	

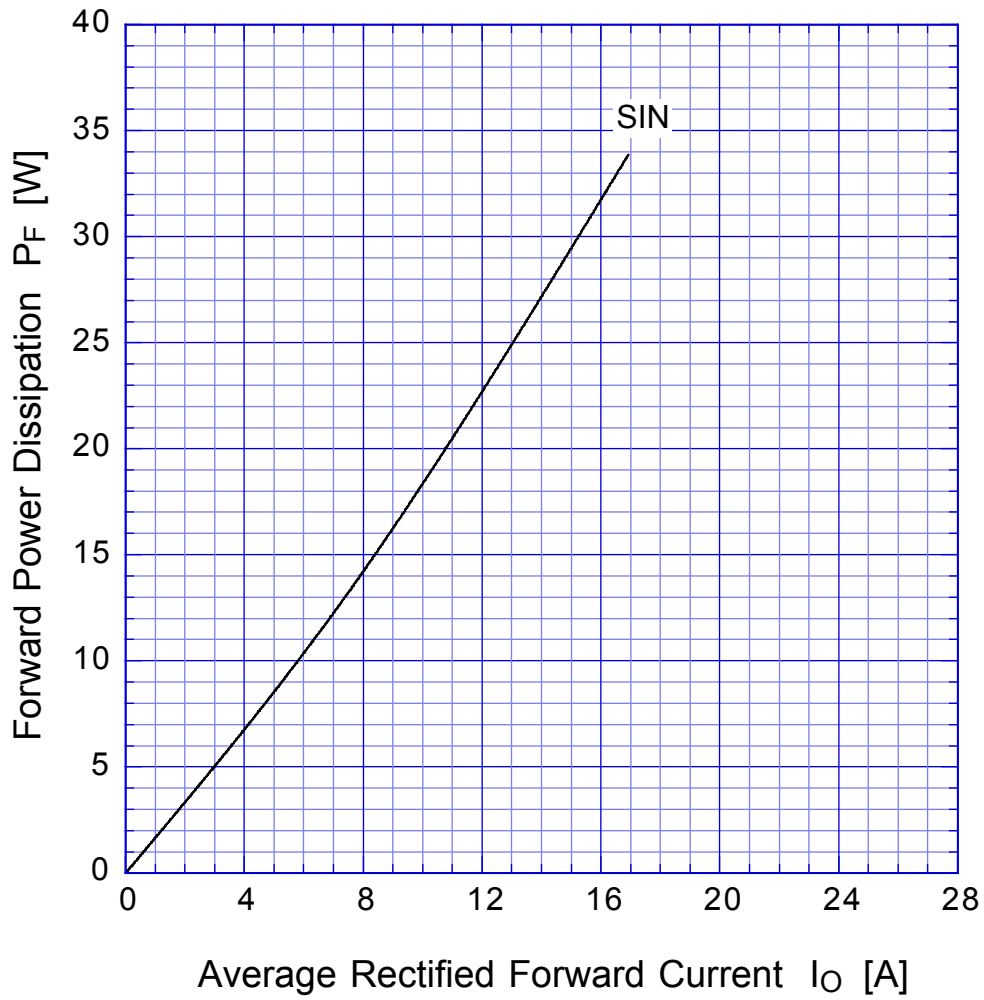


S15WBx

Forward Voltage



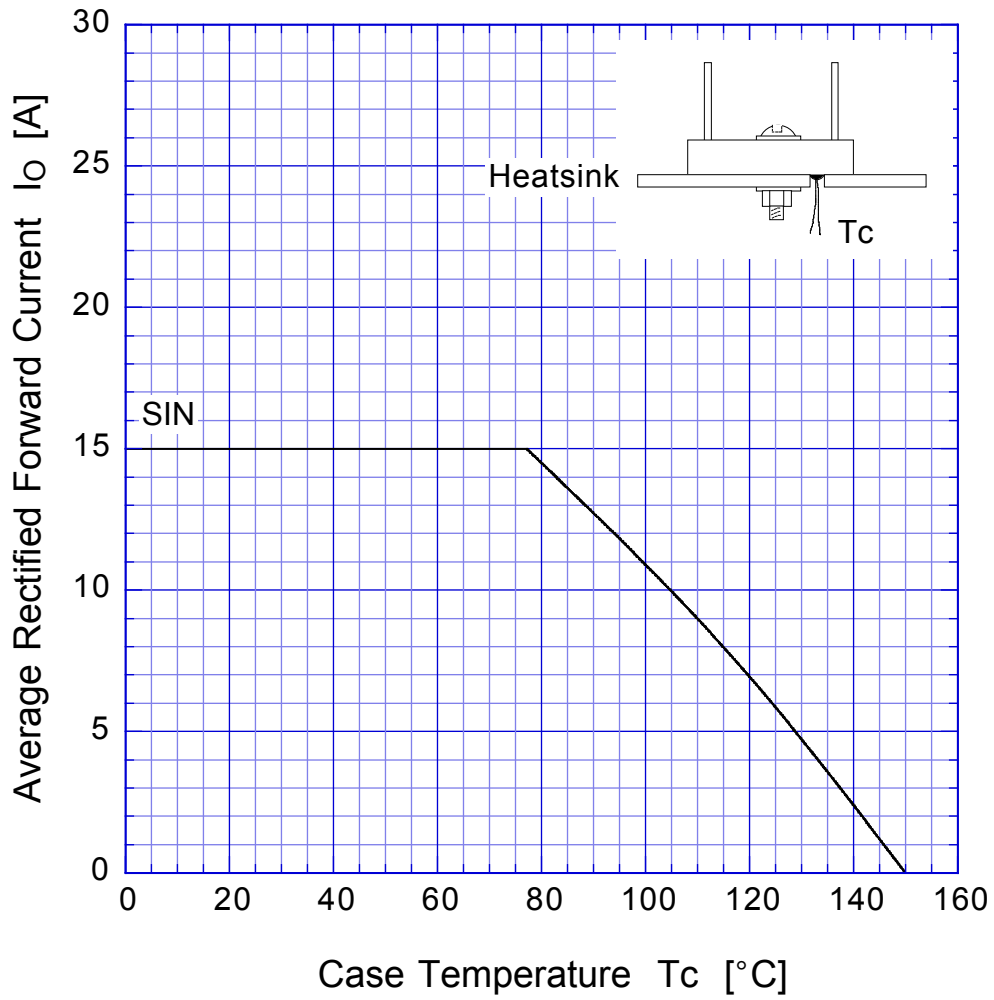
# S15WBx Forward Power Dissipation



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

# S15WBx

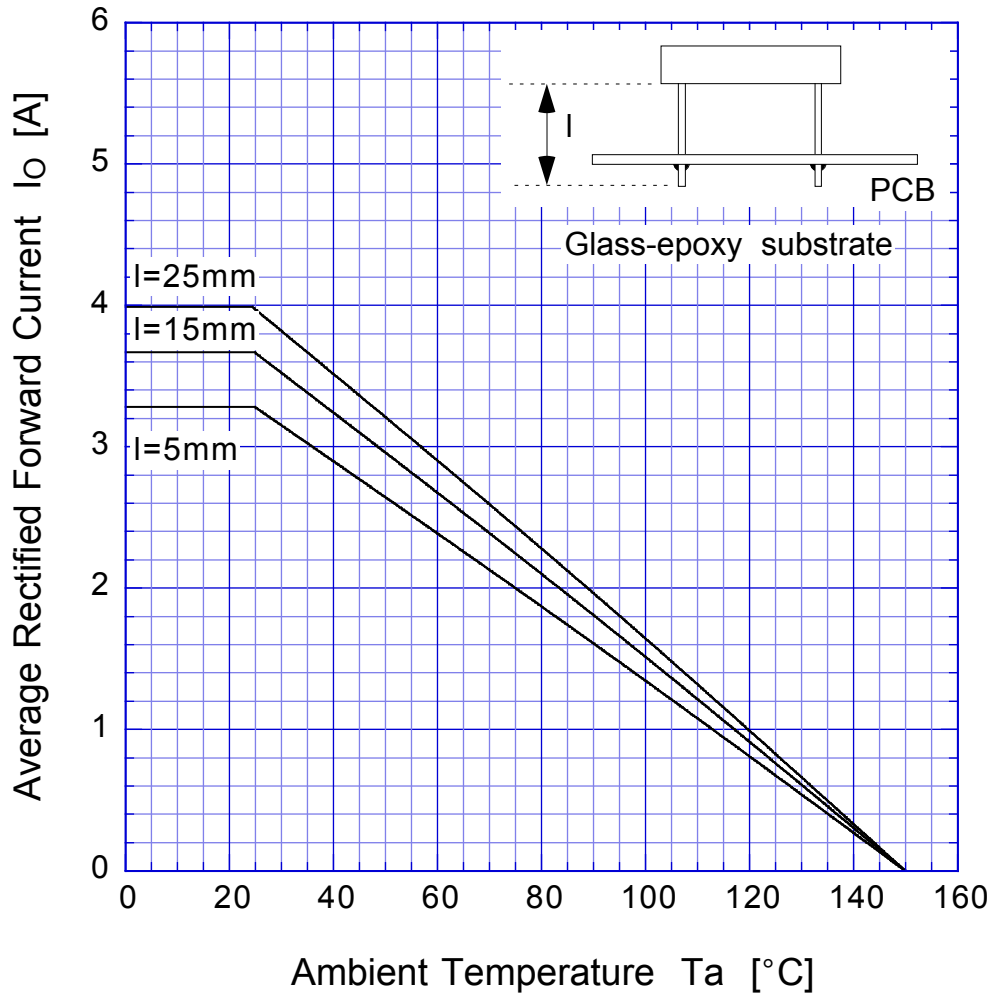
# Derating Curve



Sine wave  
R-load  
with heatsink

# S15WBx

# Derating Curve



Sine wave  
R-load  
Free in air

# S15WBx

## Peak Surge Forward Capability

