

# SHINDENGEN

## General Purpose Rectifiers

SIL Bridges

# D20XB20

## 200V 20A

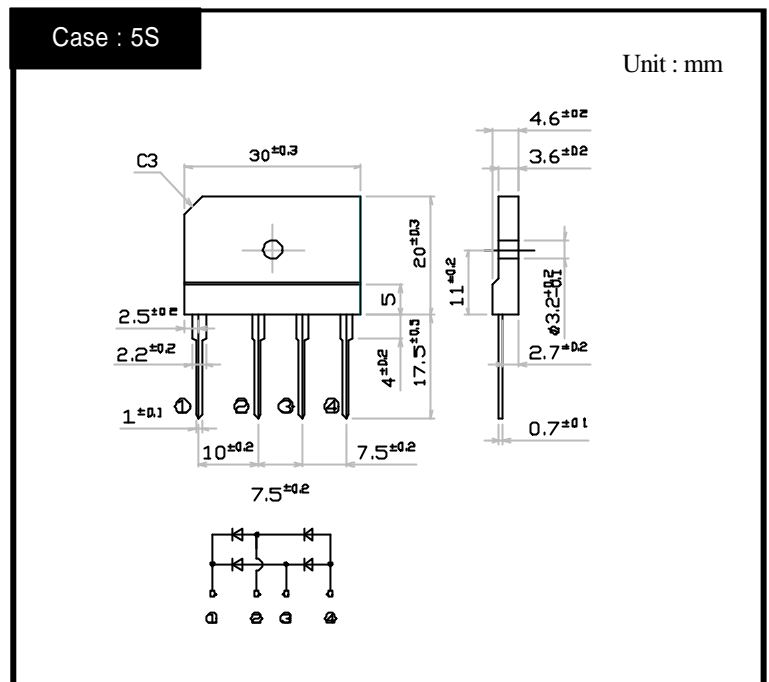
### FEATURES

- Thin Single In-Line Package
- High current capacity with Small Package
- High IFSM
- Superior Thermal Conductivity

### APPLICATION

- Switching power supply
- Home Appliances, Office Equipment
- Factory Automation, Inverter

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified Tc=25 )

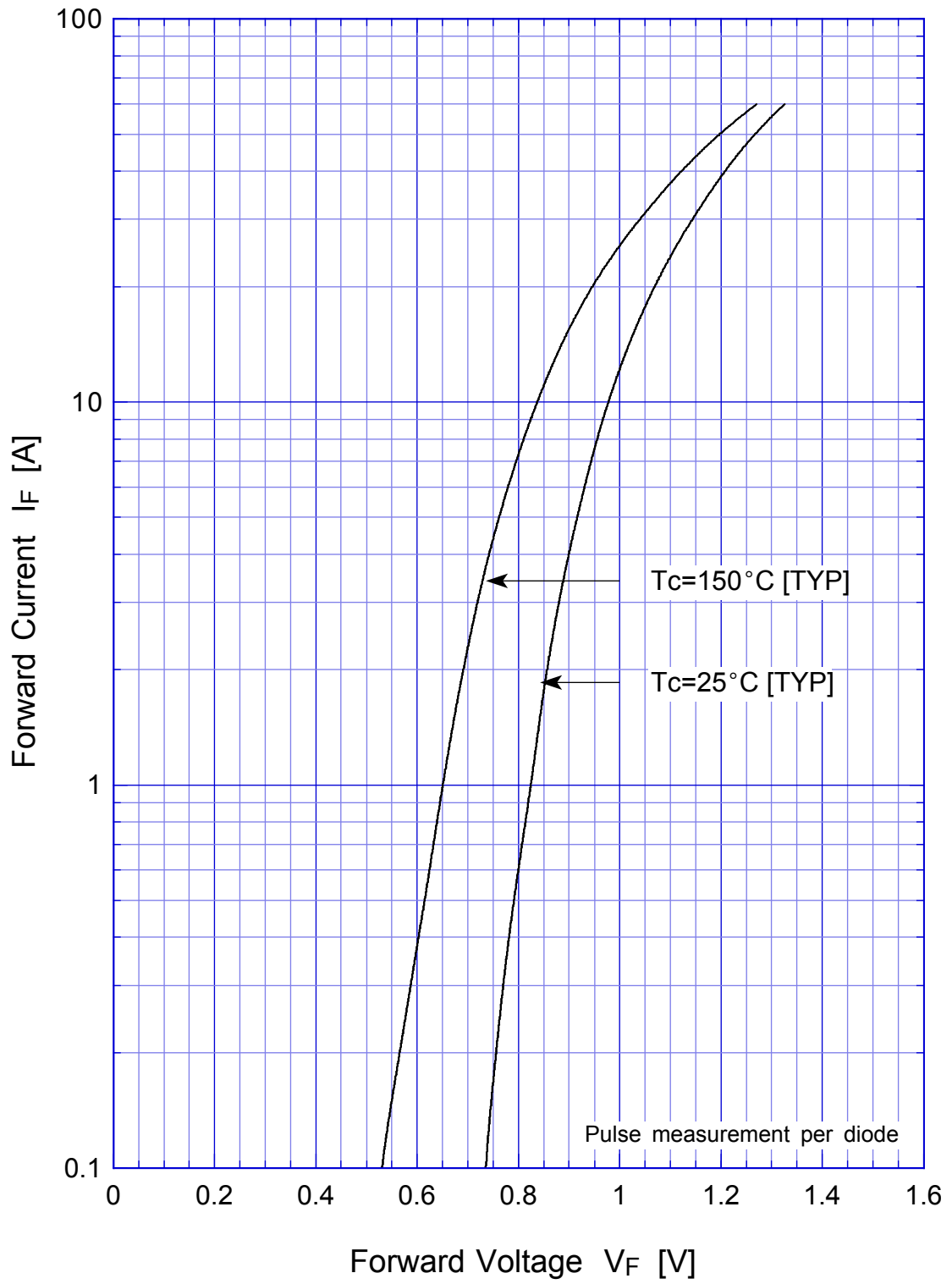
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V <sub>RM</sub>		200	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load With heatsink Tc=87	20	A
		50Hz sine wave, R-load Without heatsink Ta=25	3.5	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25	240	A
Current Squared Time	I <sup>2</sup> t	1ms t < 10ms Tj=25	200	A <sup>2</sup> s
Dielectric Strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2.5	kV
Mounting Torque	TOR	(Recommended torque : 0.5N·m )	0.8	N·m

Electrical Characteristics (If not specified Tc=25 )

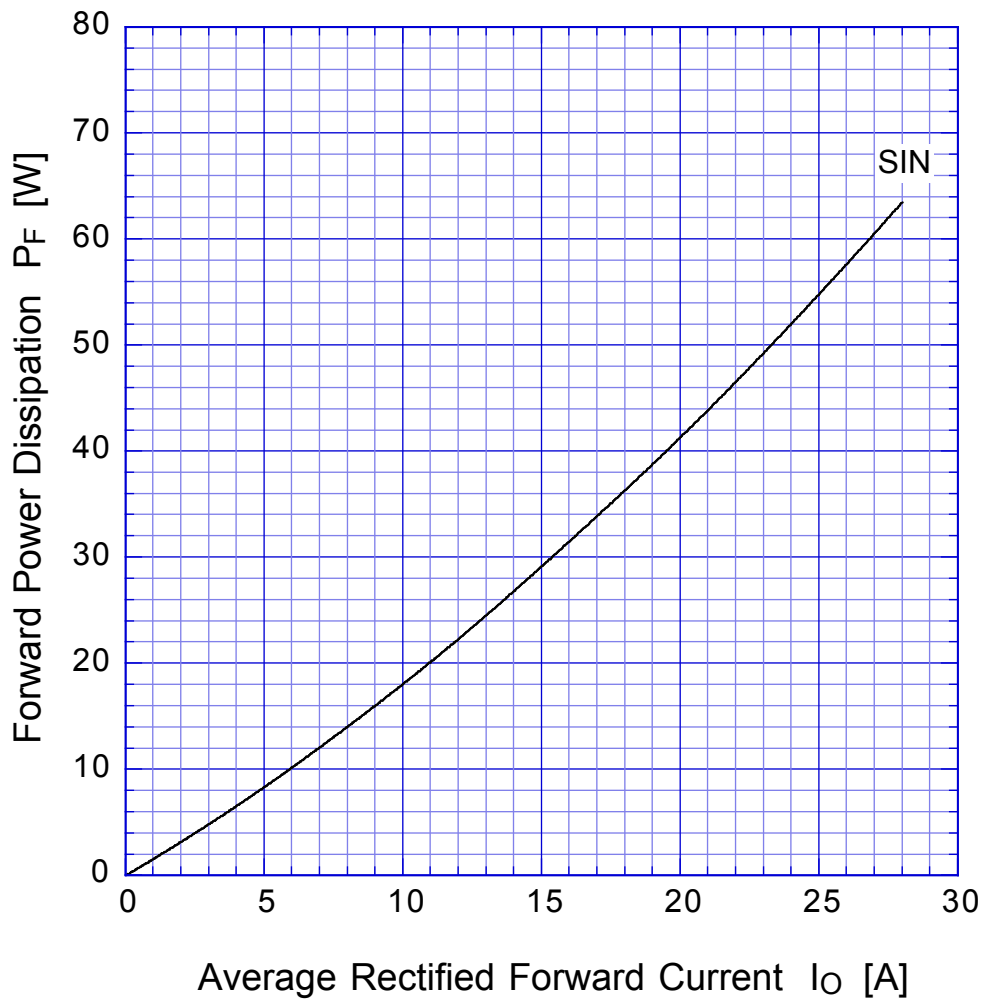
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =10A, Pulse measurement, Rating of per diode	Max.1.1	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	j-c	junction to case With heatsink	Max.1.5	/W
	j-l	junction to lead Without heatsink	Max.5	
	j-a	junction to ambient Without heatsink	Max.22	

D20XBx

Forward Voltage



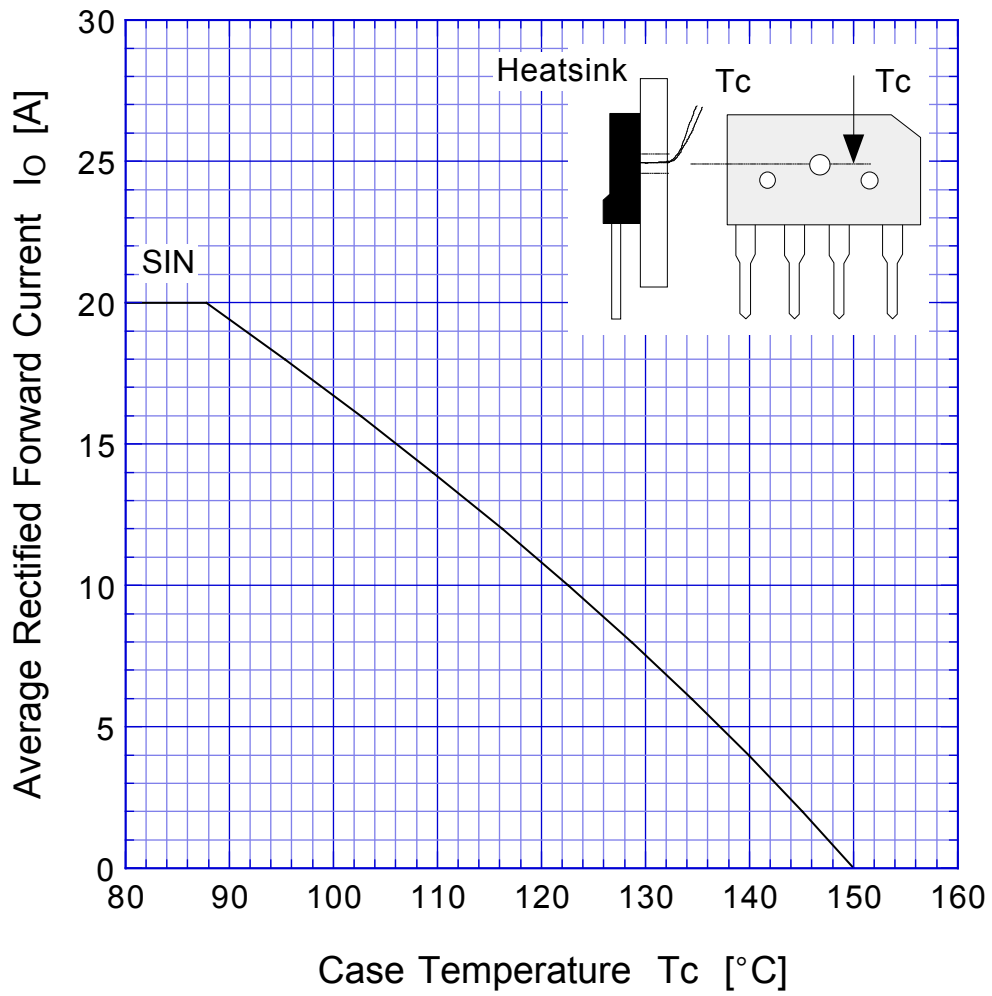
## D20XBx Forward Power Dissipation



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

# D20XBx

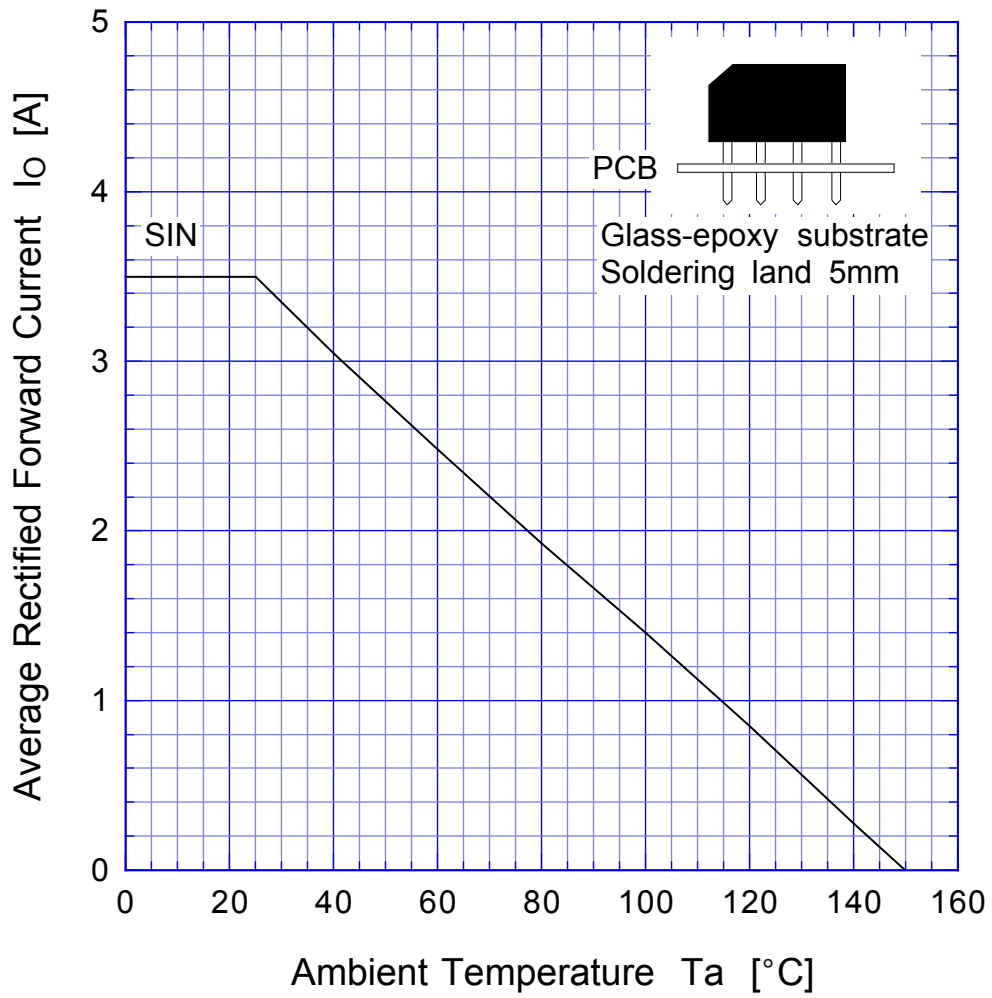
# Derating Curve



Sine wave  
R-load  
with heatsink

# D20XBx

# Derating Curve



Sine wave  
R-load  
Free in air

# D20XBx

## Peak Surge Forward Capability

