

# SHINDENGEN

## General Purpose Rectifiers

SIL Bridges

# D10XB80

## 800V 10A

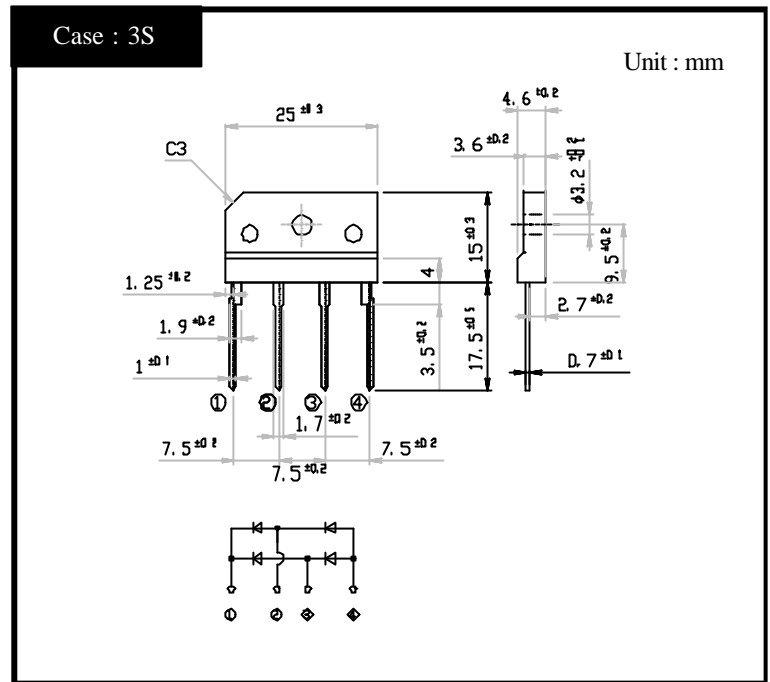
### FEATURES

- 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

### OUTLINEDIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified Tc=25 )

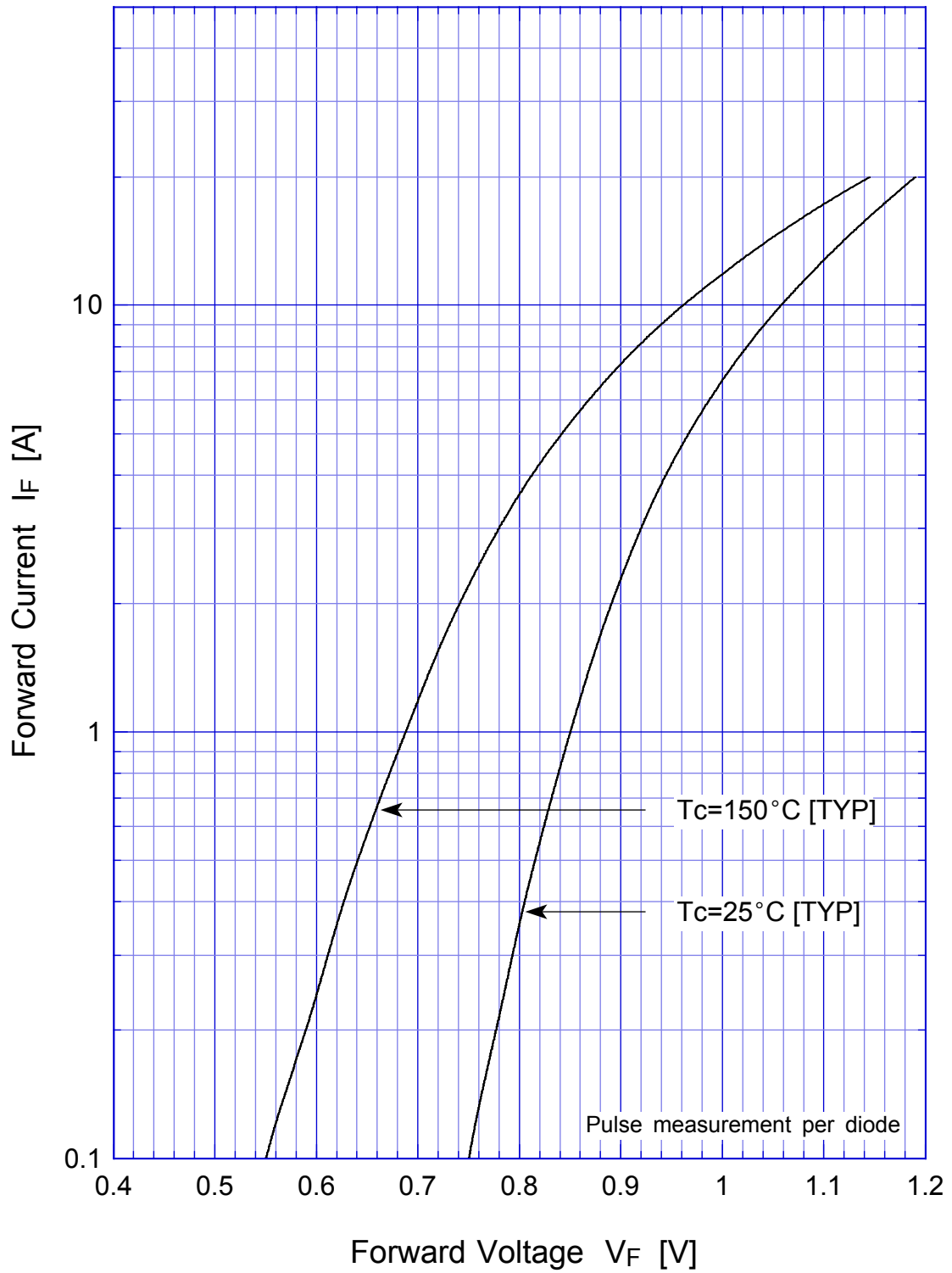
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-40 ~ 150	
Operating Junction Temperature	T <sub>j</sub>		150	
Maximum Reverse Voltage	V <sub>RM</sub>		800	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load With heatsink Tc=100	10	A
		50Hz sine wave, R-load Without heatsink Ta=25	2.7	
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25	120	A
Current Squared Time	I <sup>2</sup> t	1ms t < 10ms Tj=25	60	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 )

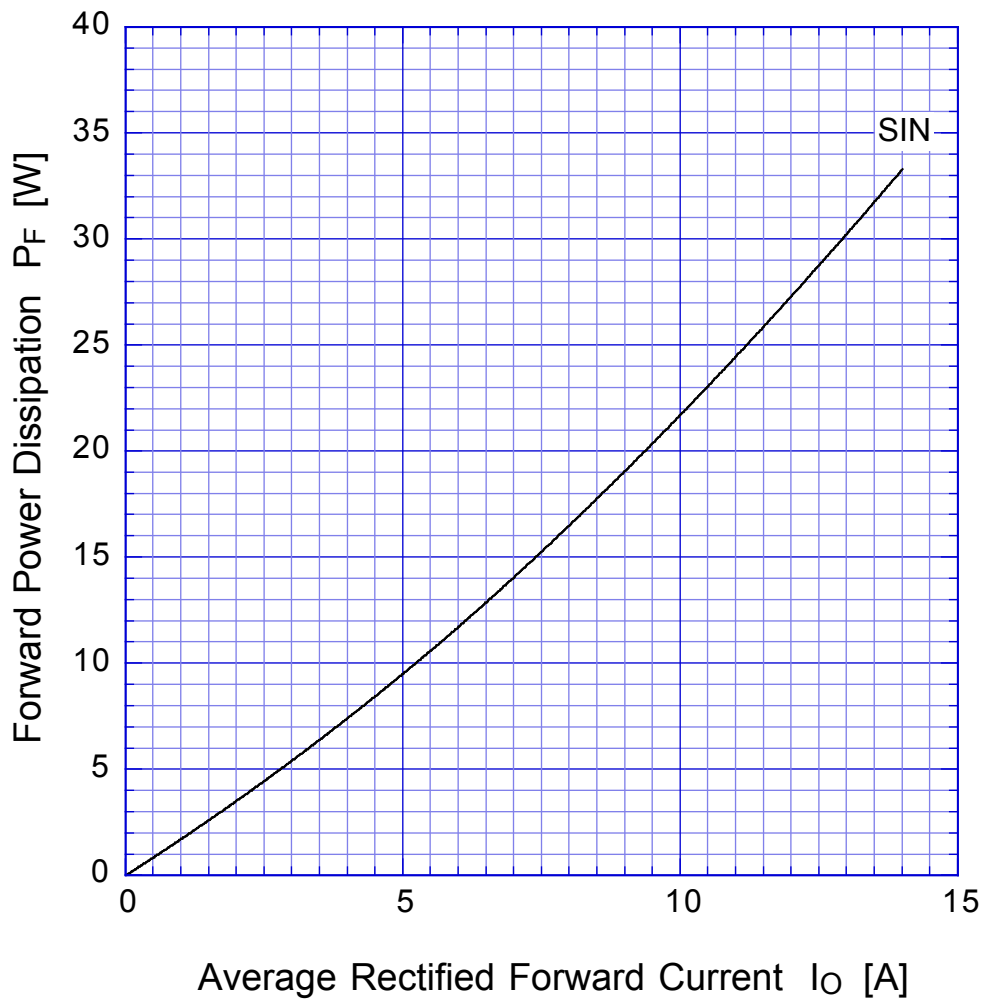
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5A, Pulse measurement, Rating of per diode	Max.1.1	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	i <sub>c</sub>	junction to case With heatsink	Max.2.3	/W
	j <sub>l</sub>	junction to lead Without heatsink	Max.6	
	j <sub>a</sub>	junction to ambient Without heatsink	Max.26	

D10XBx

Forward Voltage



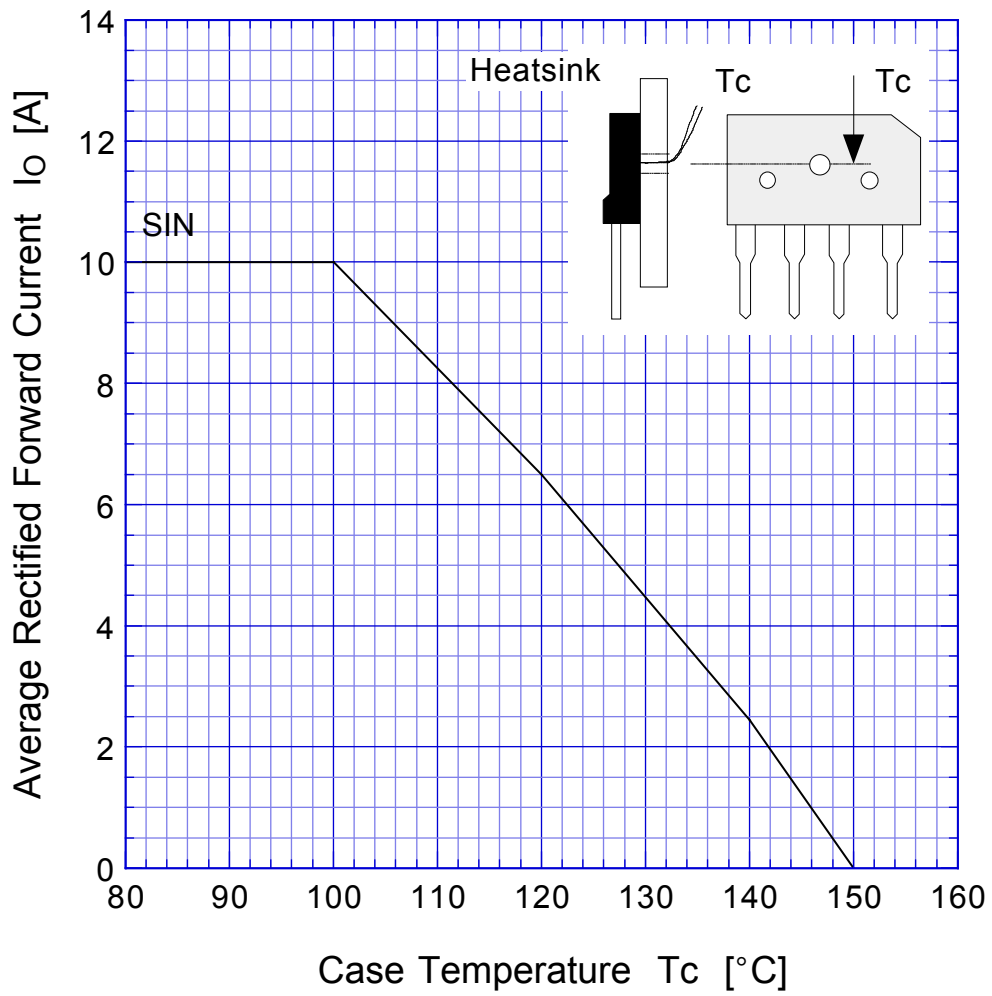
# D10XBx Forward Power Dissipation



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

# D10XBx

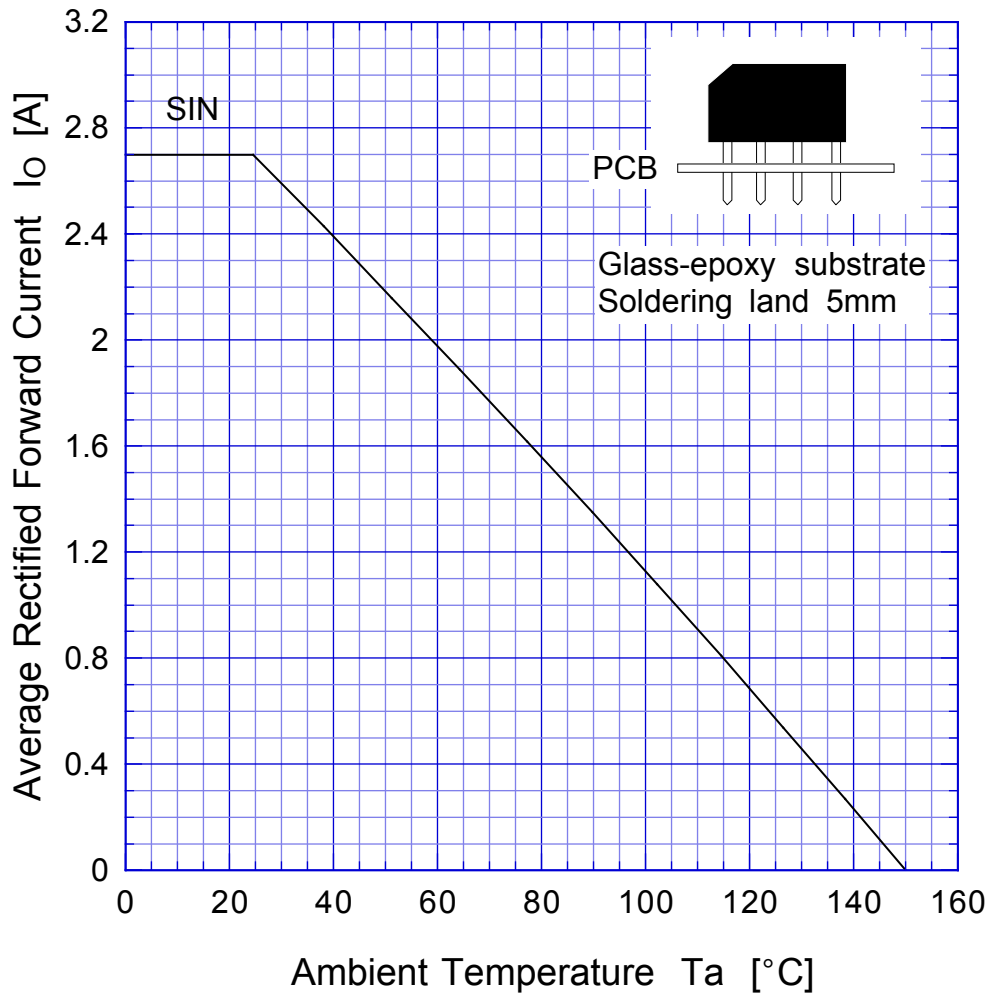
# Derating Curve



Sine wave  
R-load  
with heatsink

# D10XBx

# Derating Curve



Sine wave  
R-load  
Free in air

# D10XBx

## Peak Surge Forward Capability

