

# SHINDENGEN

## General Purpose Rectifiers

SIL Bridges

**D10XB20**

**200V 10A**

### FEATURES

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

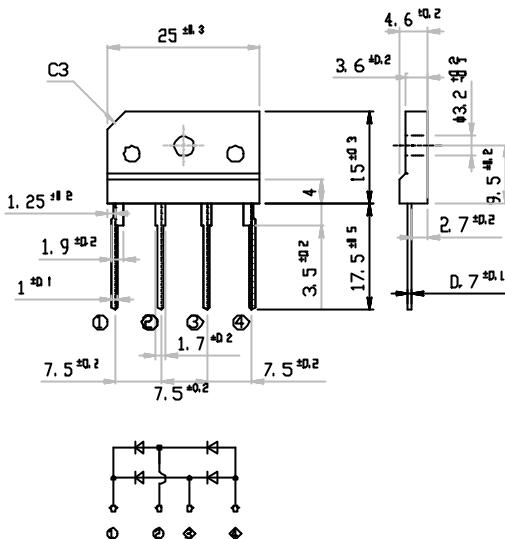
### APPLICATION

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

### OUTLINE DIMENSIONS

Case : 3S

Unit : mm



### RATINGS

Absolute Maximum Ratings (If not specified  $T_c=25^\circ C$ )

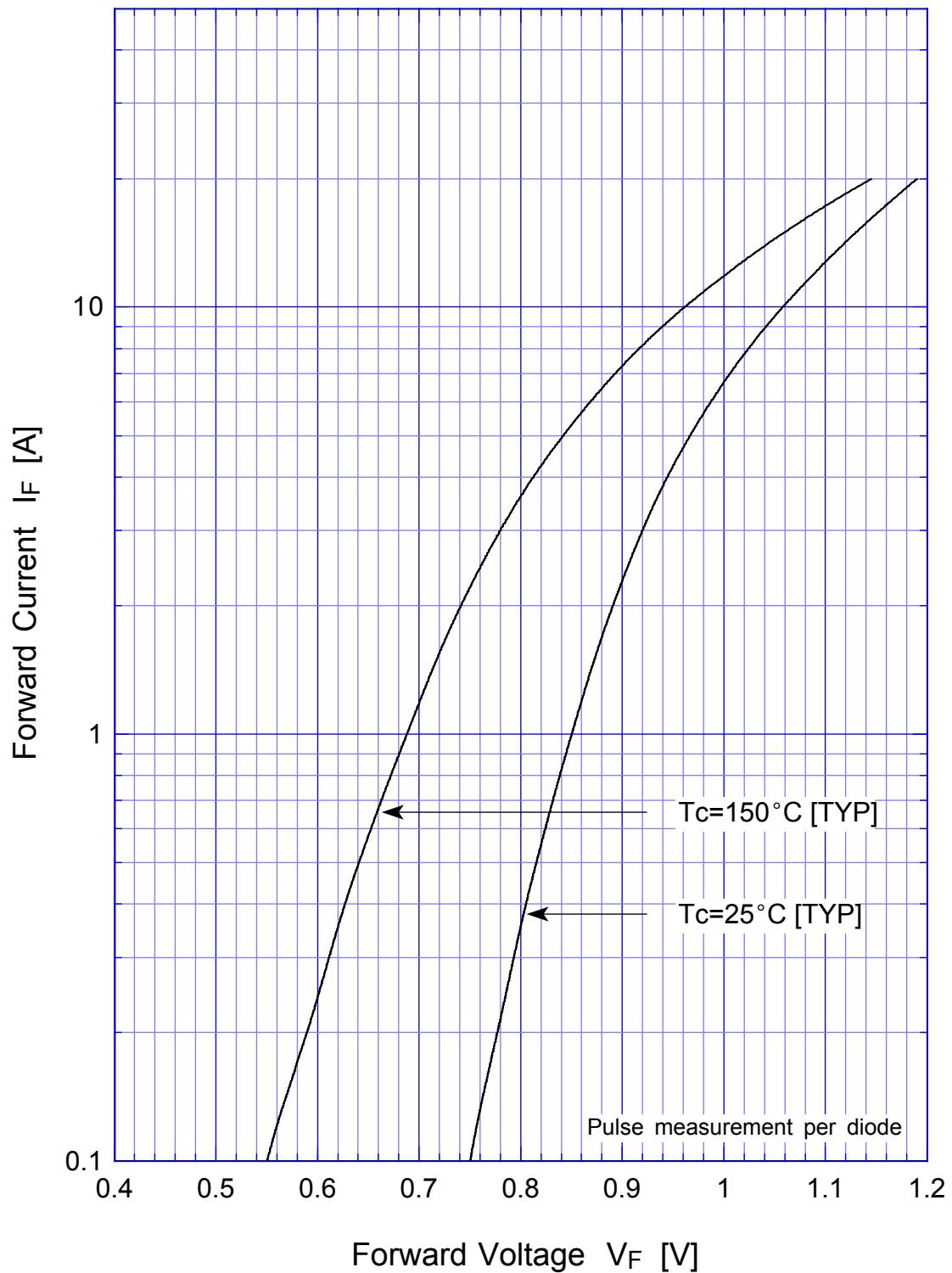
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		200	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load With heatsink $T_c=100$ 50Hz sine wave, R-load Without heatsink $T_a=25$	10 2.7	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25$	120	A
Current Squared Time	$I^2t$	1ms $t < 10ms$ $T_j=25$	60	A <sup>2</sup> s
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2.5	kV
Mounting Torque	$T_{OR}$	(Recommended torque 0.5N·m)	0.8	N·m

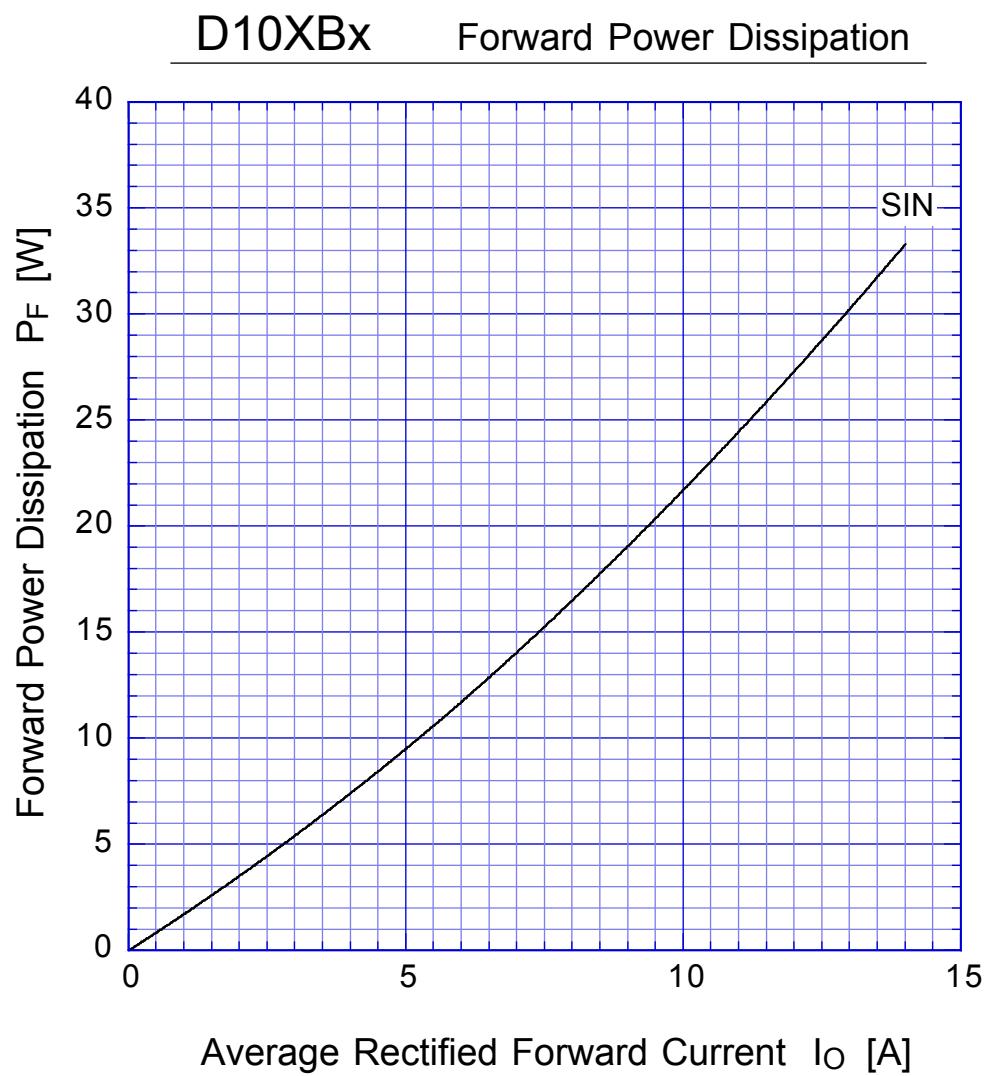
Electrical Characteristics (If not specified  $T_c=25^\circ C$ )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=5A$ , Pulse measurement, Rating of per diode	Max.1.1	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.10	$\mu A$
Thermal Resistance	$j_c$	junction to case With heatsink	Max.2.3	/W
	$j_l$	junction to lead Without heatsink	Max.6	
	$j_a$	junction to ambient Without heatsink	Max.26	

# D10XBx

## Forward Voltage

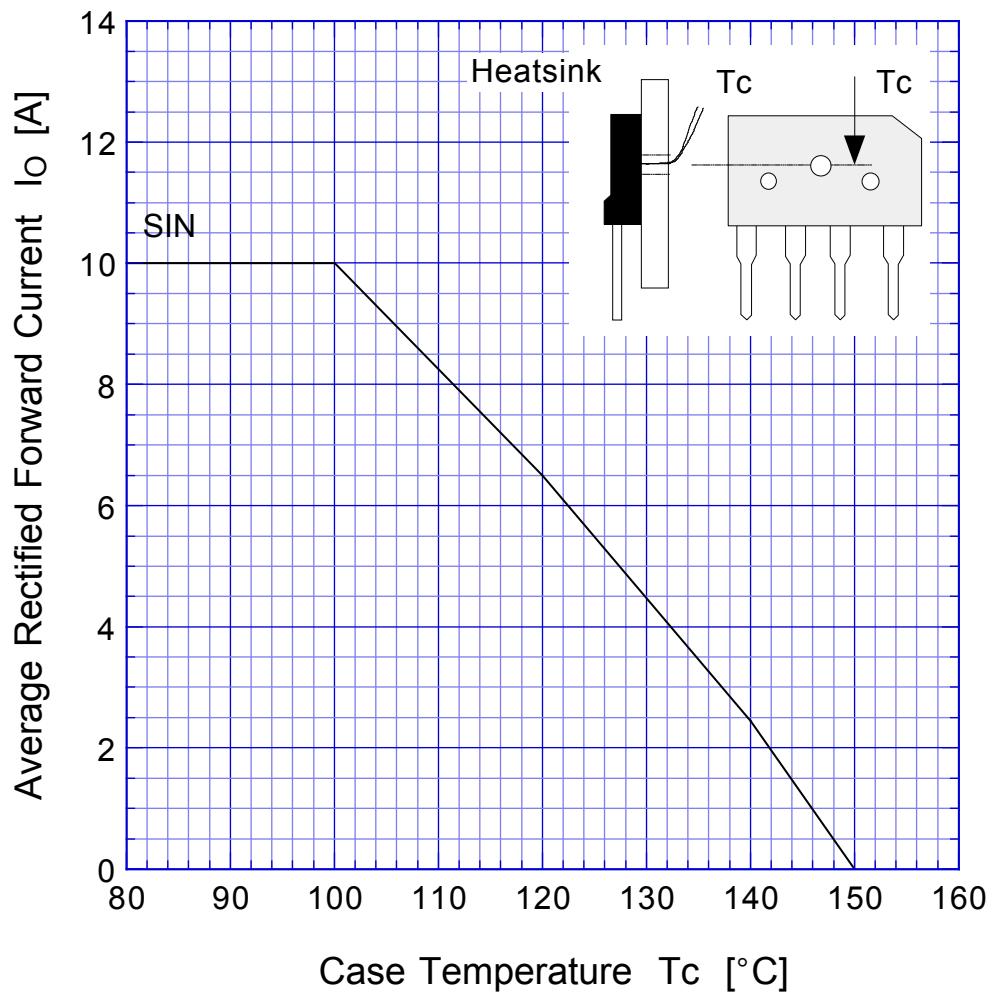




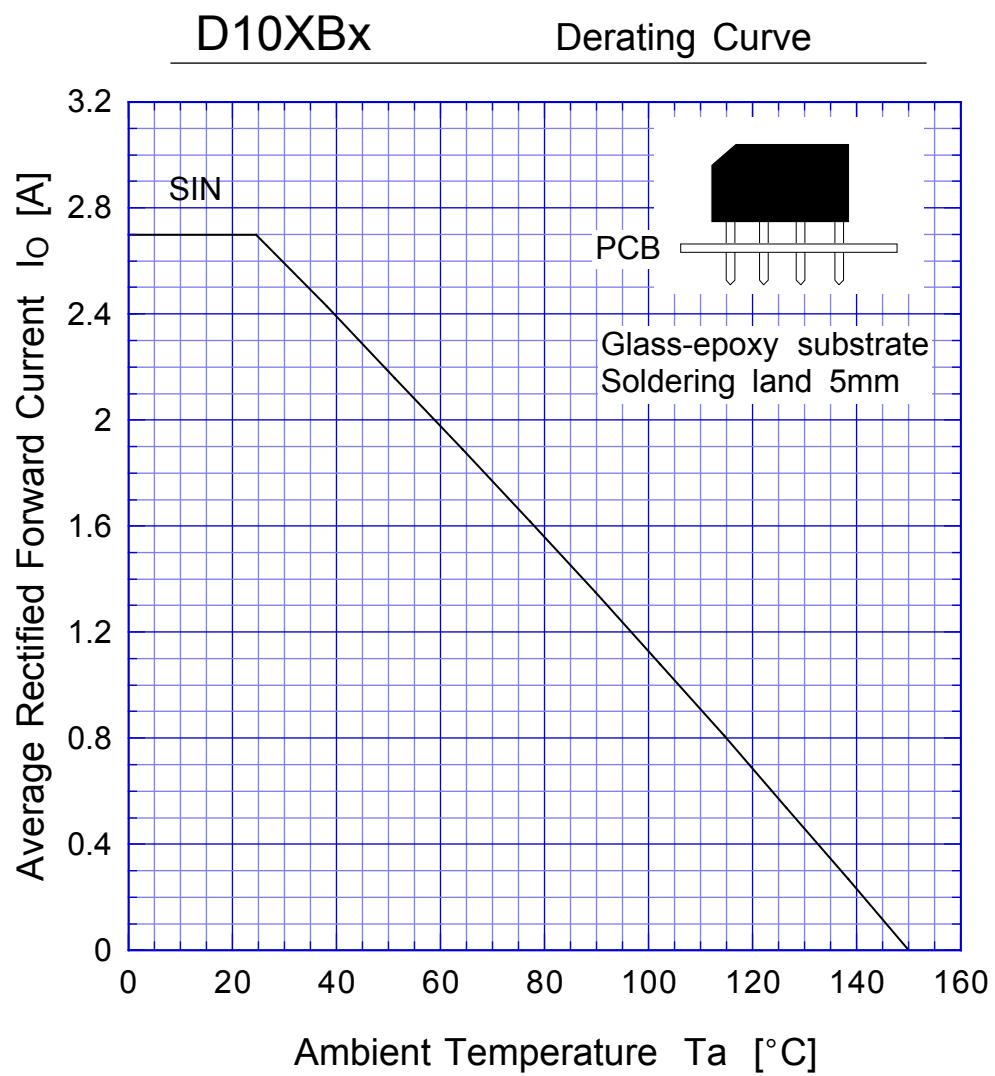
$T_j = 150^\circ\text{C}$   
Sine wave

# D10XBx

## Derating Curve



Sine wave  
R-load  
with heatsink



Sine wave  
R-load  
Free in air

# D10XBx

## Peak Surge Forward Capability

