

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

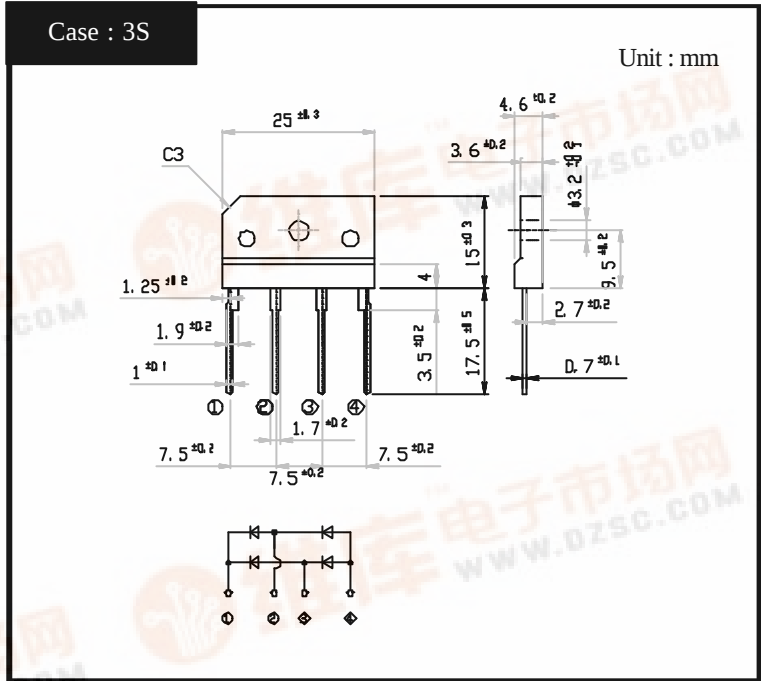
APPLICATION

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

■ OUTLINE DIMENSIONS

Case : 3S

Unit : mm



RATINGS

- Absolute Maximum Ratings (If not specified Tc=25)

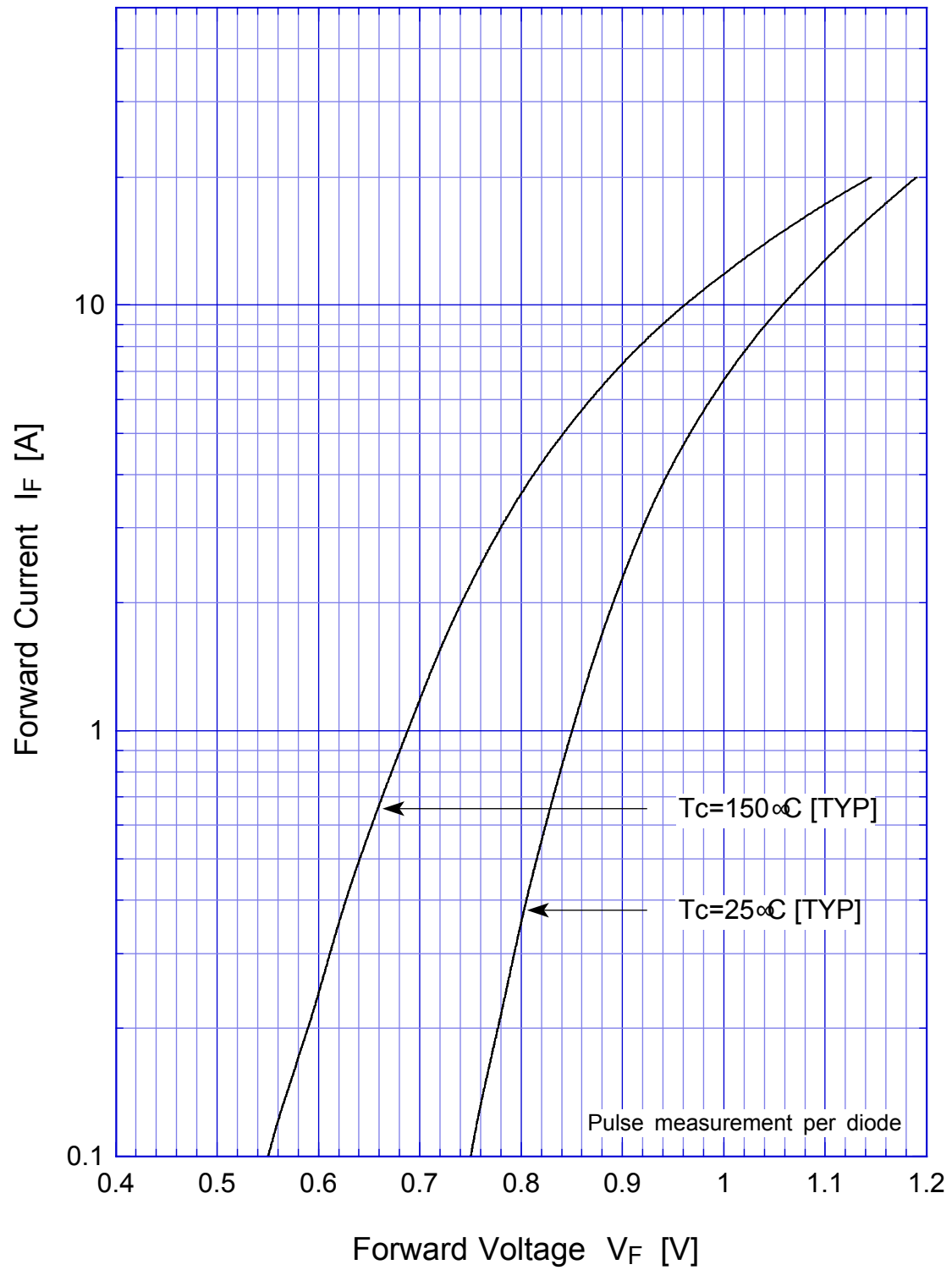
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40 ~ 150	
Operating Junction Temperature	T _j		150	
Maximum Reverse Voltage	V _{RM}		200	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load With heatsink Tc=100	10	A
		50Hz sine wave, R-load Without heatsink Ta=25	2.7	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25	120	A
Current Squared Time	I ² t	1ms t < 10ms Tj=25	60	A ² s
Dielectric Strength	V _{dis}	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 _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	μA
Thermal Resistance	θ _{jc}	junction to case With heatsink	Max.2.3	/W
	θ _{jl}	junction to lead Without heatsink	Max.6	
	θ _{ja}	junction to ambient Without heatsink	Max.26	

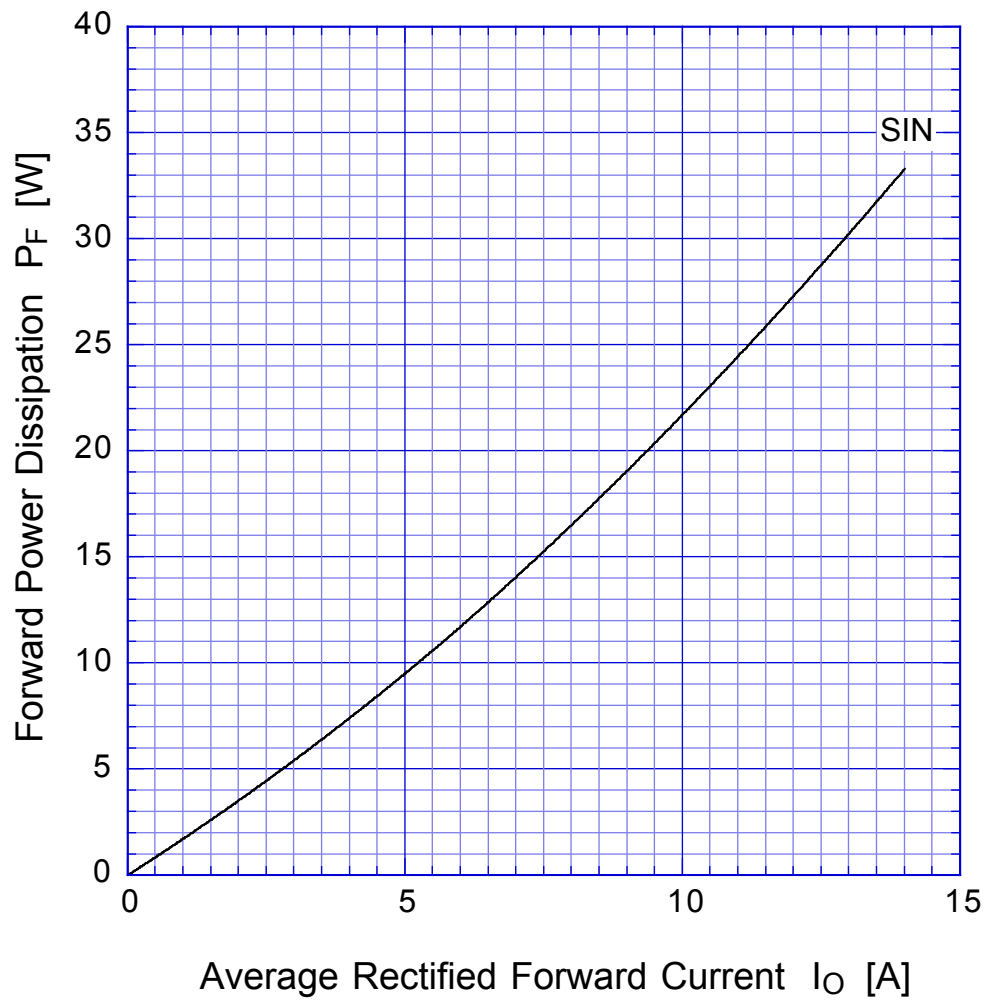
D10XBx

Forward Voltage



D10XBx

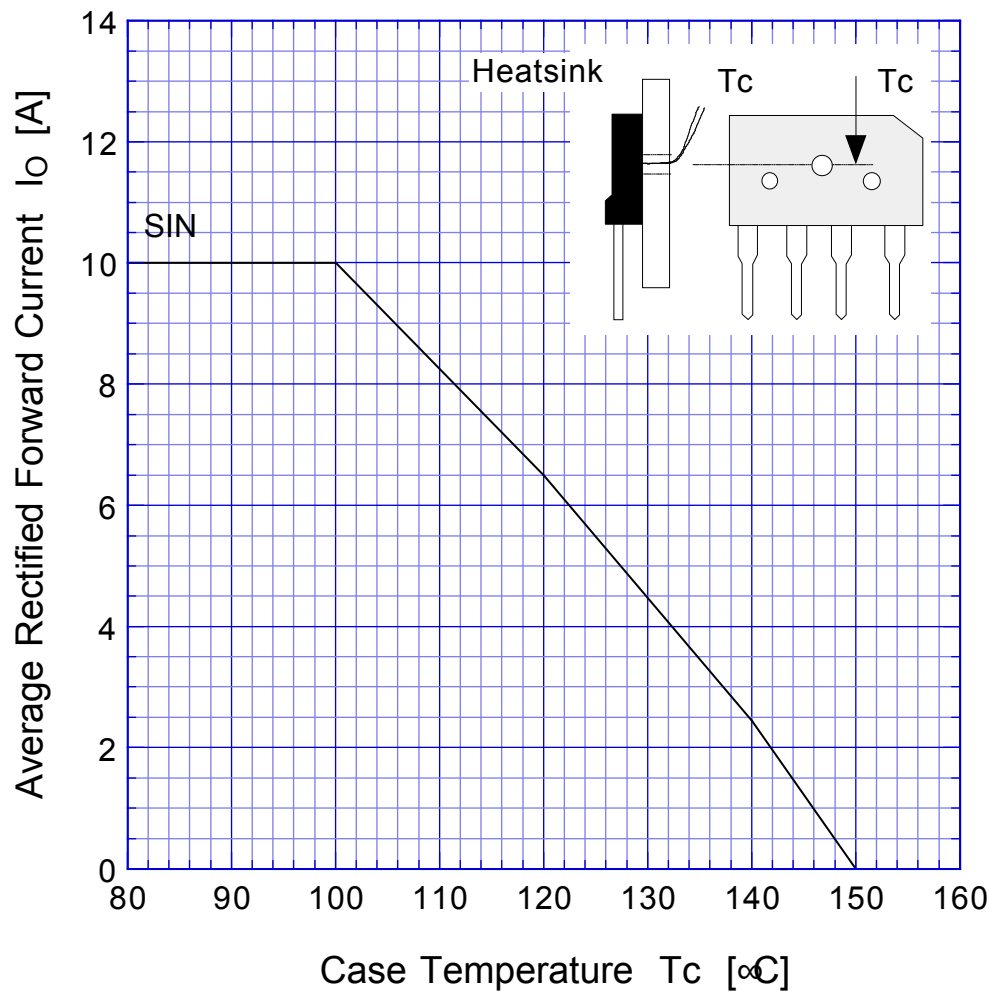
Forward Power Dissipation



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

D10XBx

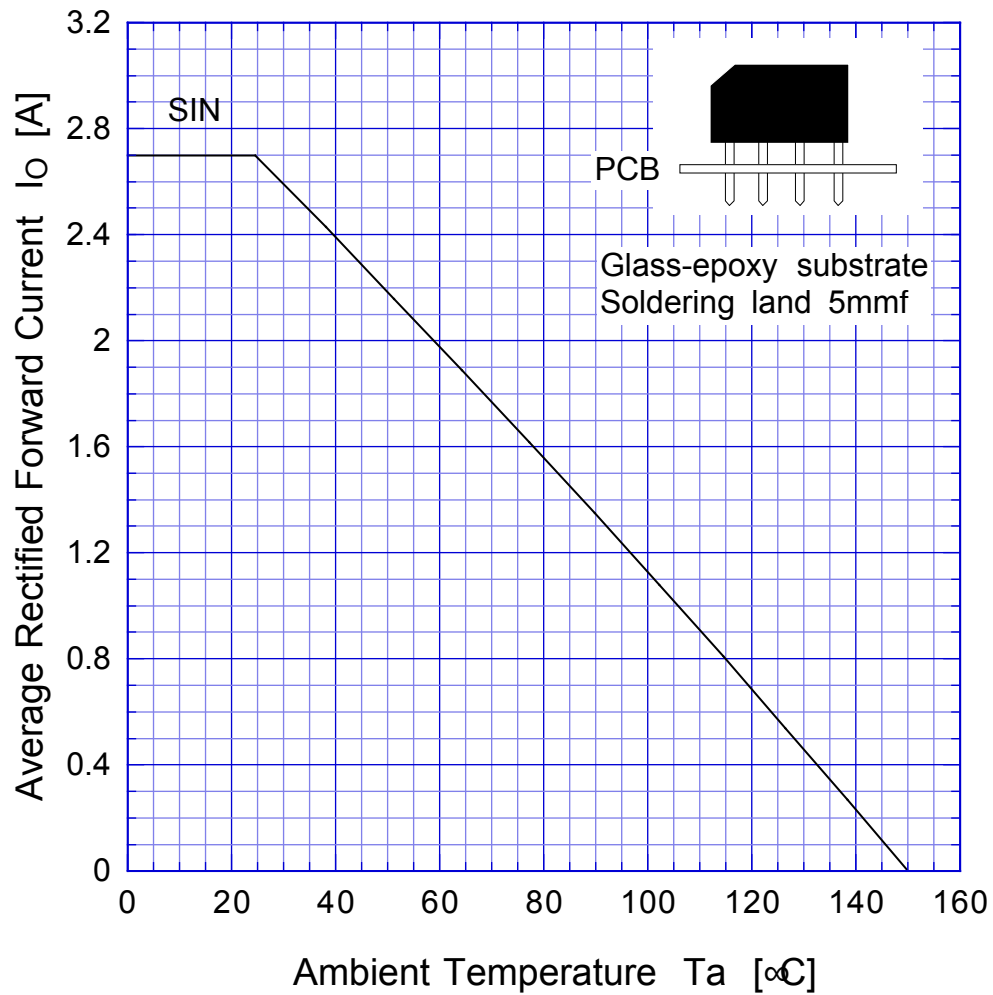
Derating Curve



Sine wave
R-load
with heatsink

D10XBx

Derating Curve



Sine wave
R-load
Free in air

D10XBx

Peak Surge Forward Capability

