

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D20XB80

800V 20A

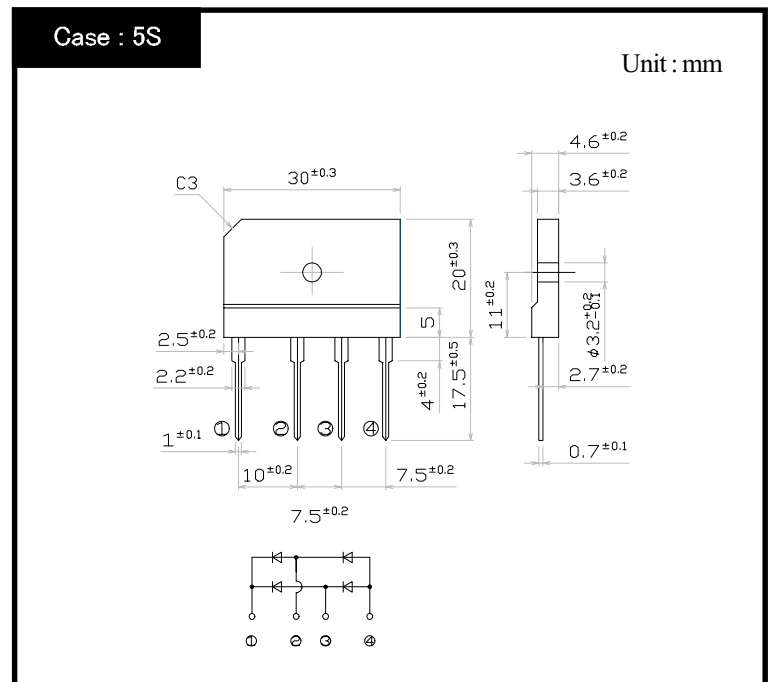
FEATURES

- 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 T_c=25°C)

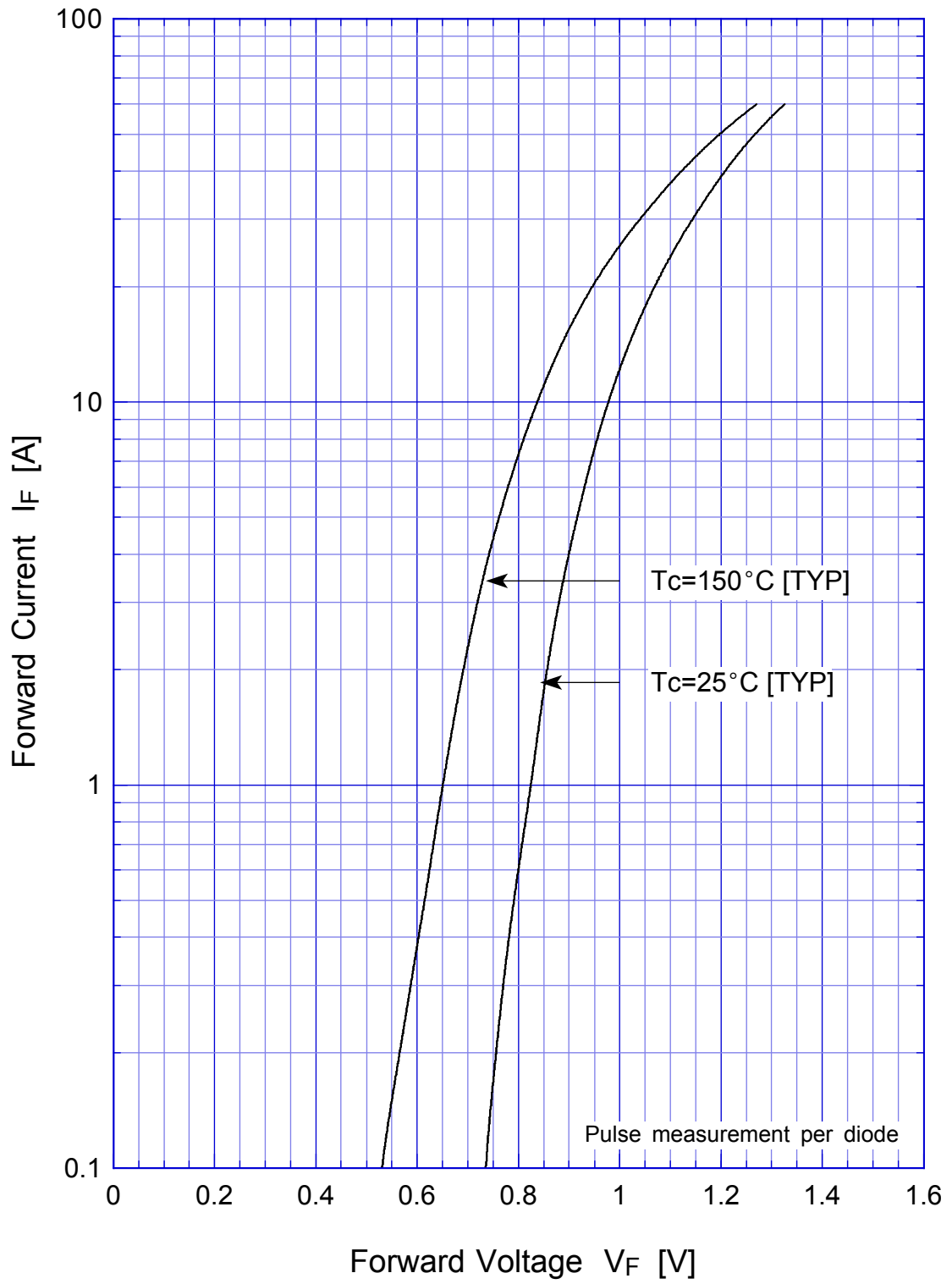
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T _{stg}		-40~150	°C
Operating Junction Temperature	T _j		150	°C
Maximum Reverse Voltage	V _{RM}		800	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load With heatsink T _c =87°C	20	A
		50Hz sine wave, R-load Without heatsink T _a =25°C	3.5	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, T _j =25 °C	240	A
Current Squared Time	I ² t	1ms ≤ t < 10ms T _j =25°C	200	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 T_c=25°C)

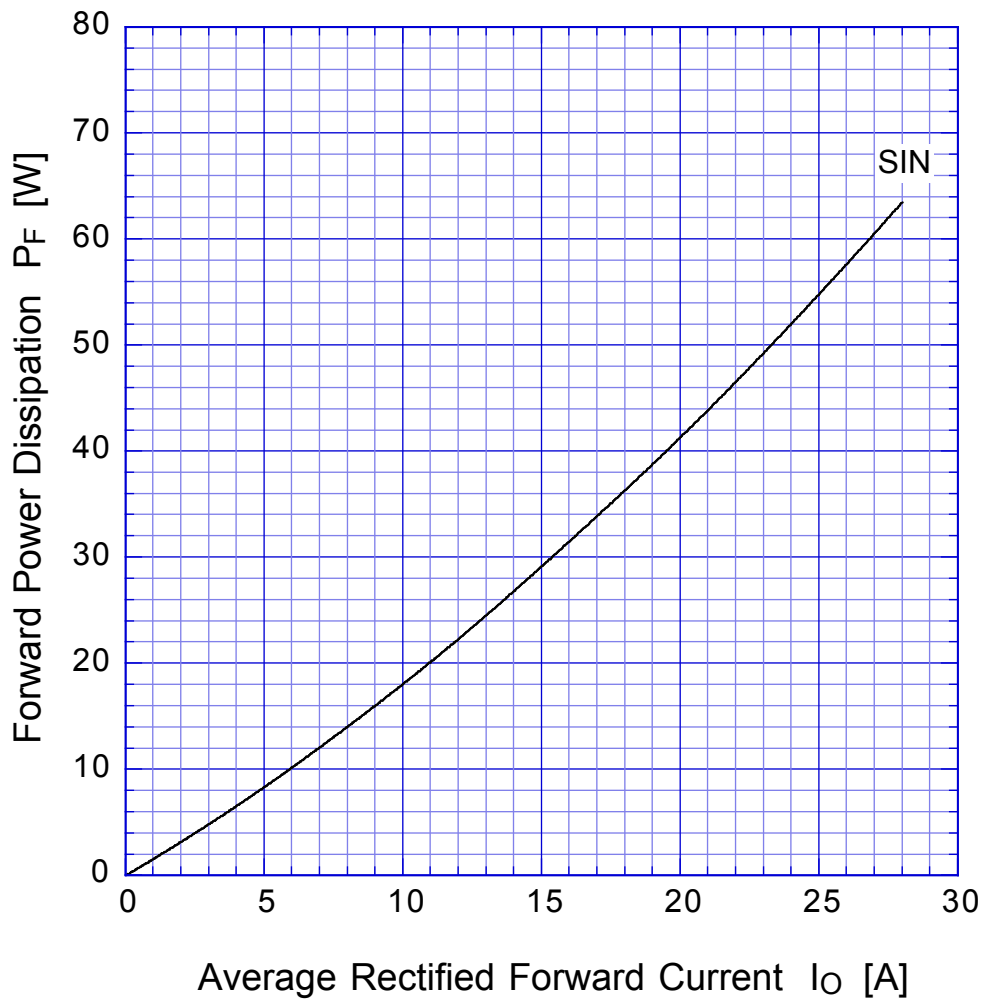
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =10A, Pulse measurement, Rating of per diode	Max.1.1	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	θ _{jc}	junction to case With heatsink	Max.1.5	°C/W
	θ _{jl}	junction to lead Without heatsink	Max.5	
	θ _{ja}	junction to ambient Without heatsink	Max.22	

D20XBx

Forward Voltage



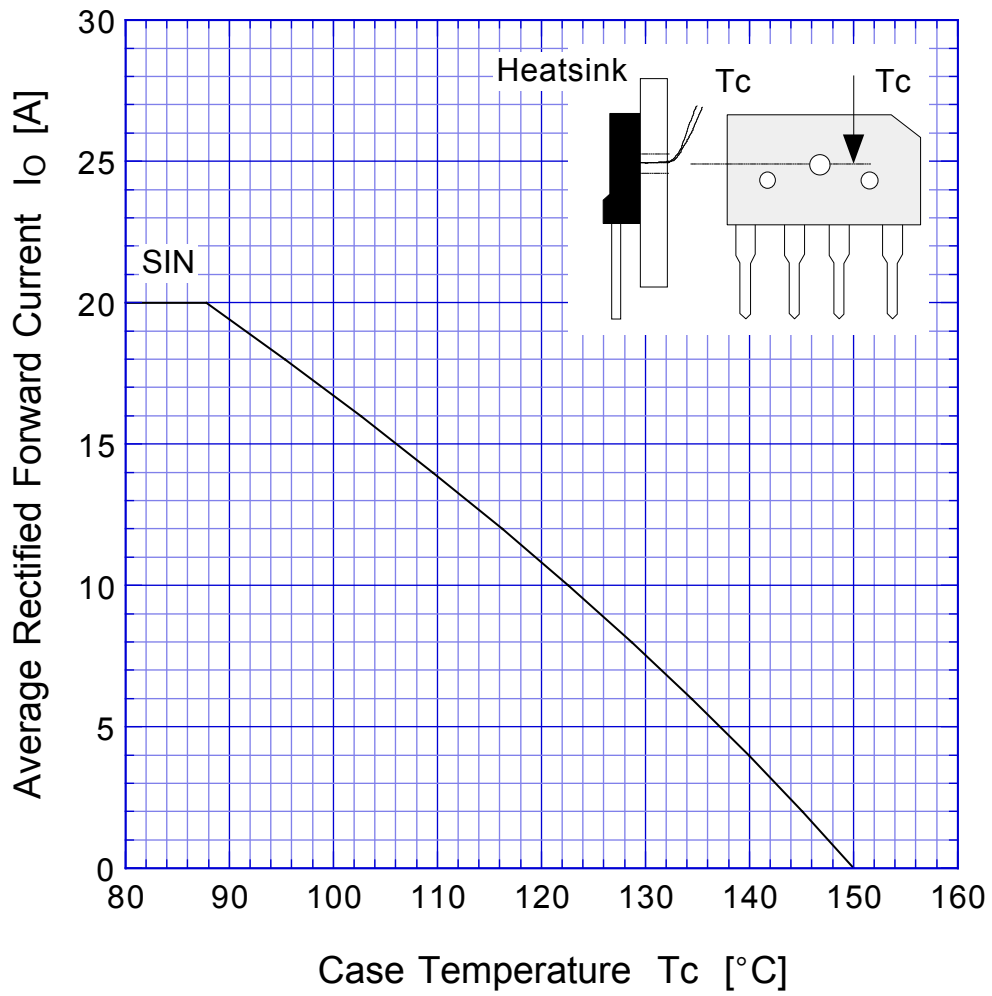
D20XBx Forward Power Dissipation



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

D20XBx

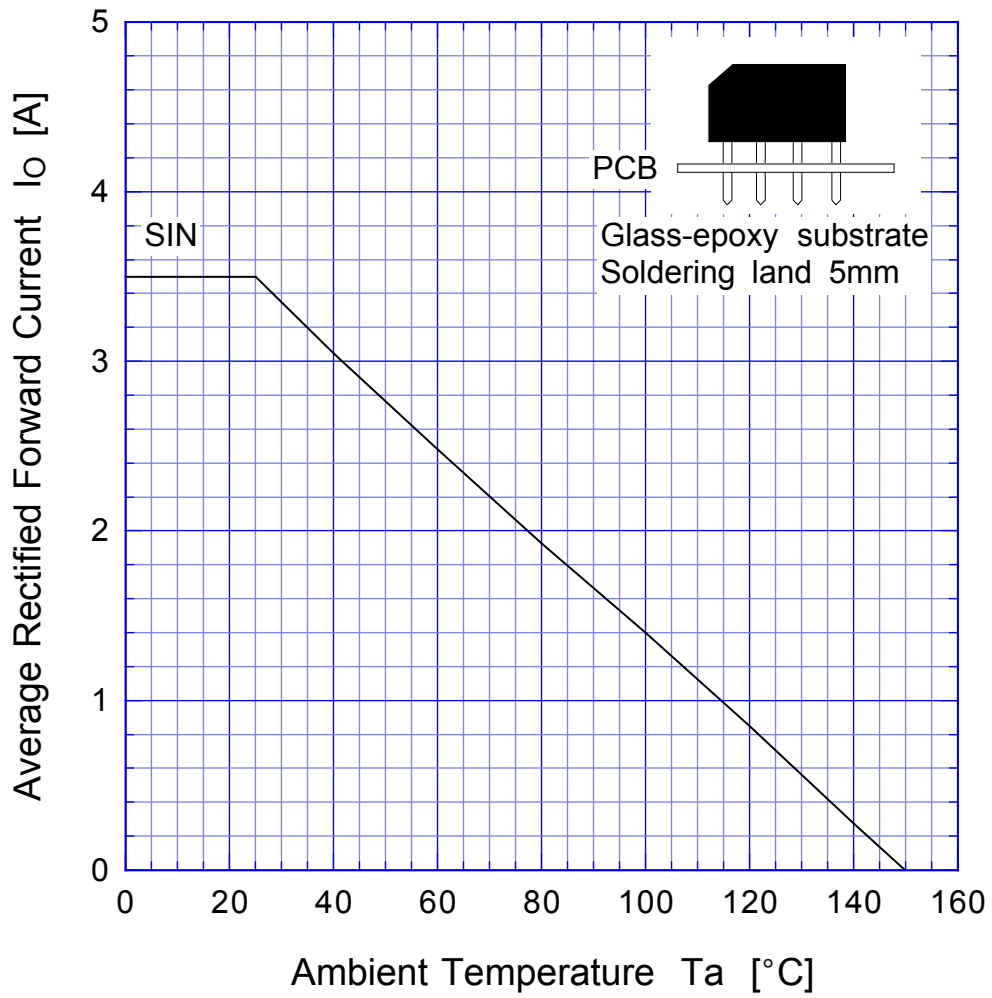
Derating Curve



Sine wave
R-load
with heatsink

D20XBx

Derating Curve



Sine wave
R-load
Free in air

D20XBx

Peak Surge Forward Capability

