

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D10XB20

200V 10A

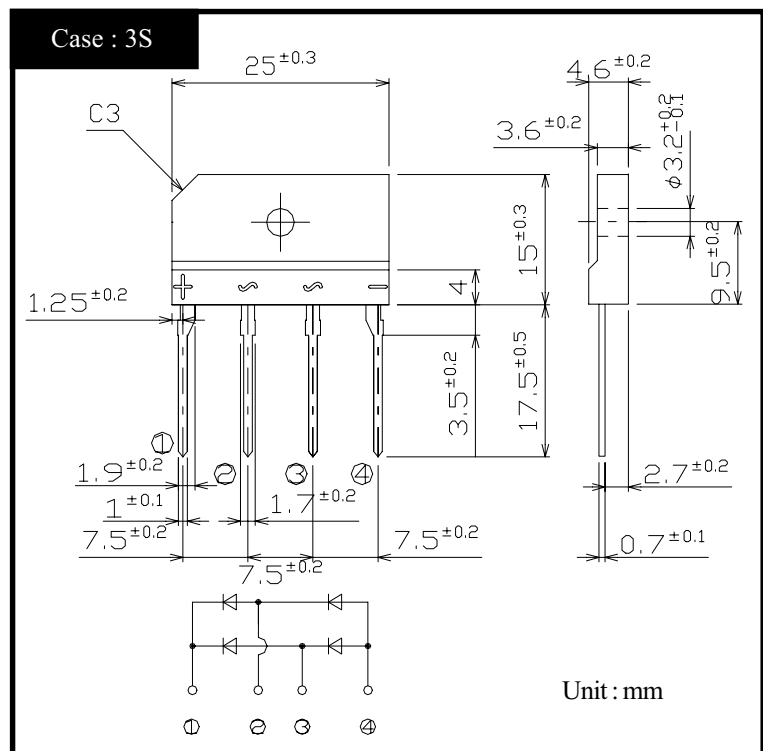
FEATURES

- 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



RATINGS

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

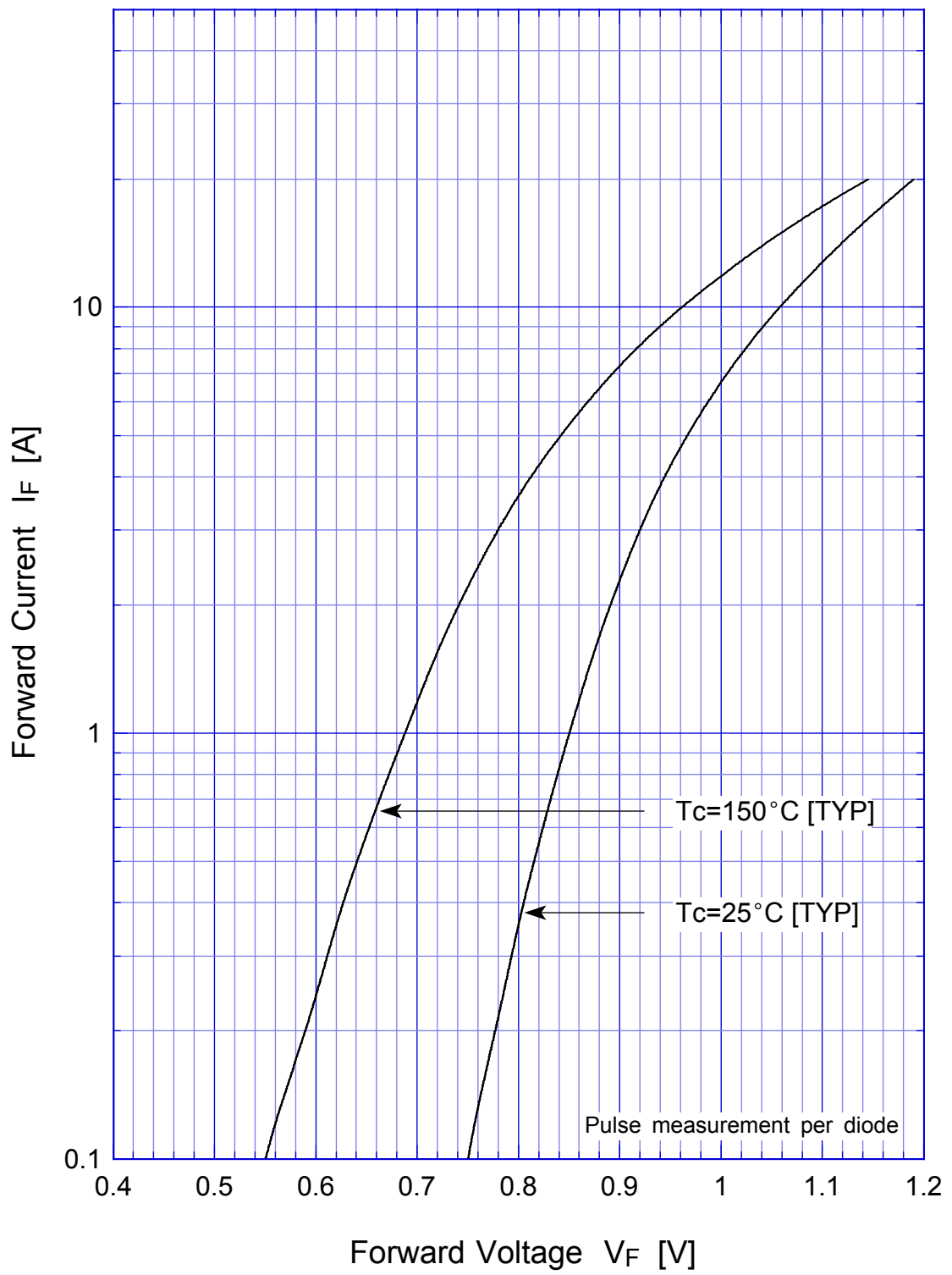
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		200	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink $T_c=100^\circ\text{C}$	10	A
		50Hz sine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

●Electrical Characteristics (If not specified $T_c=25^\circ\text{C}$)

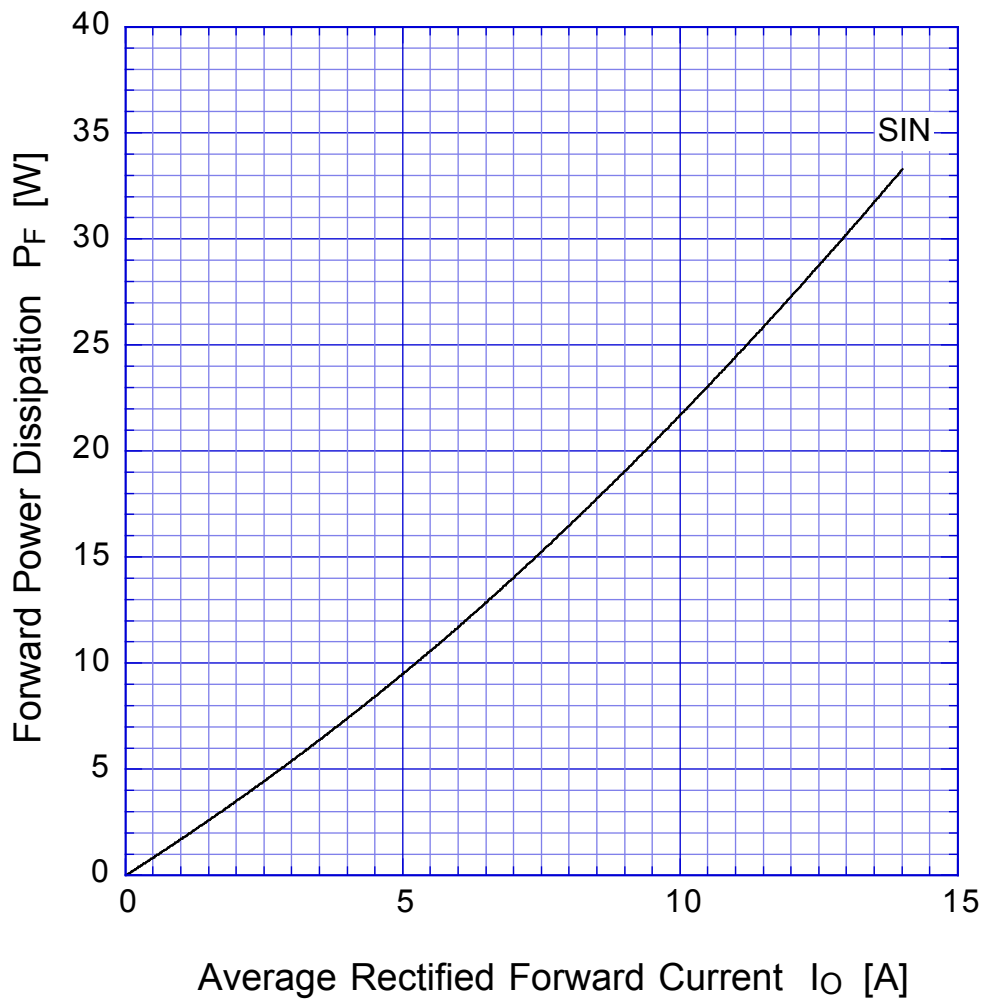
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=5\text{A}$, Pulse measurement, Rating of per diode	Max.1.1	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	θ_{jc}	junction to case With heatsink	Max.2.3	$^\circ\text{C}/\text{W}$
	θ_{jl}	junction to lead Without heatsink	Max.6	
	θ_{ja}	junction to ambient Without heatsink	Max.26	

D10XBx

Forward Voltage



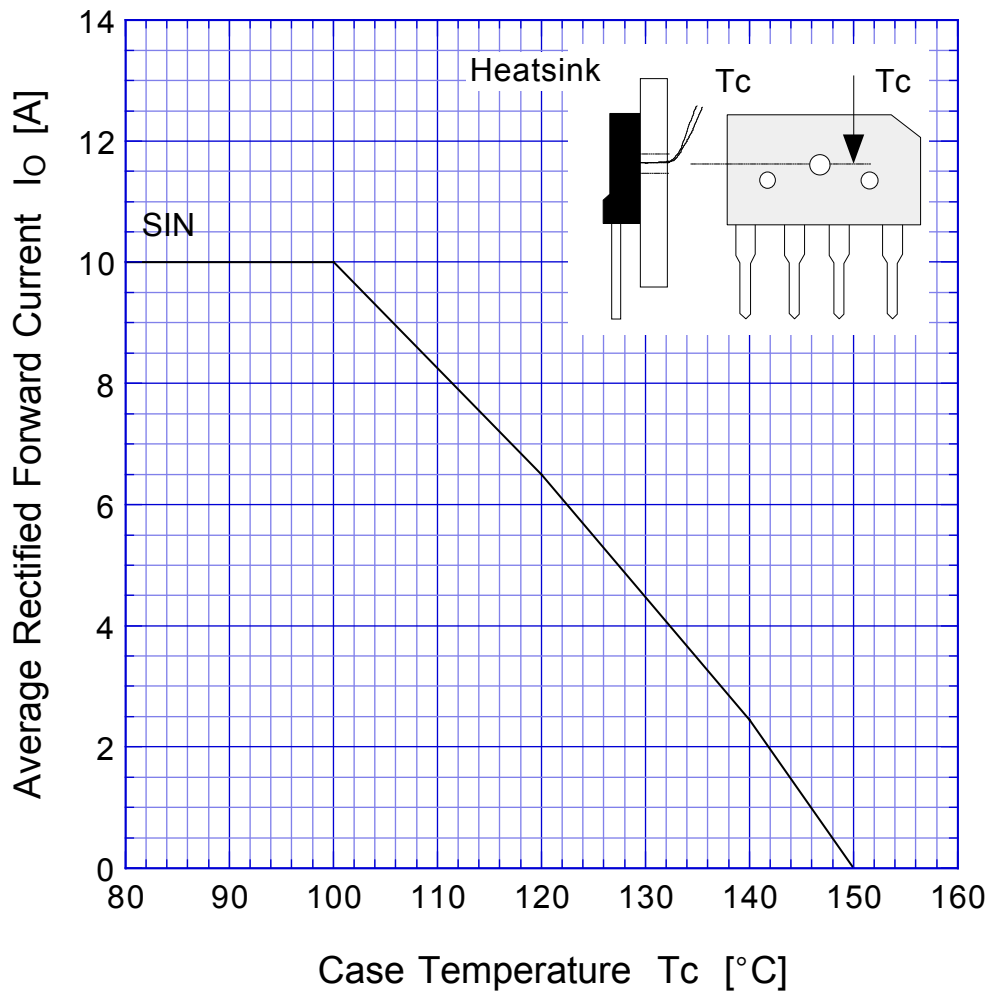
D10XBx Forward Power Dissipation



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

D10XBx

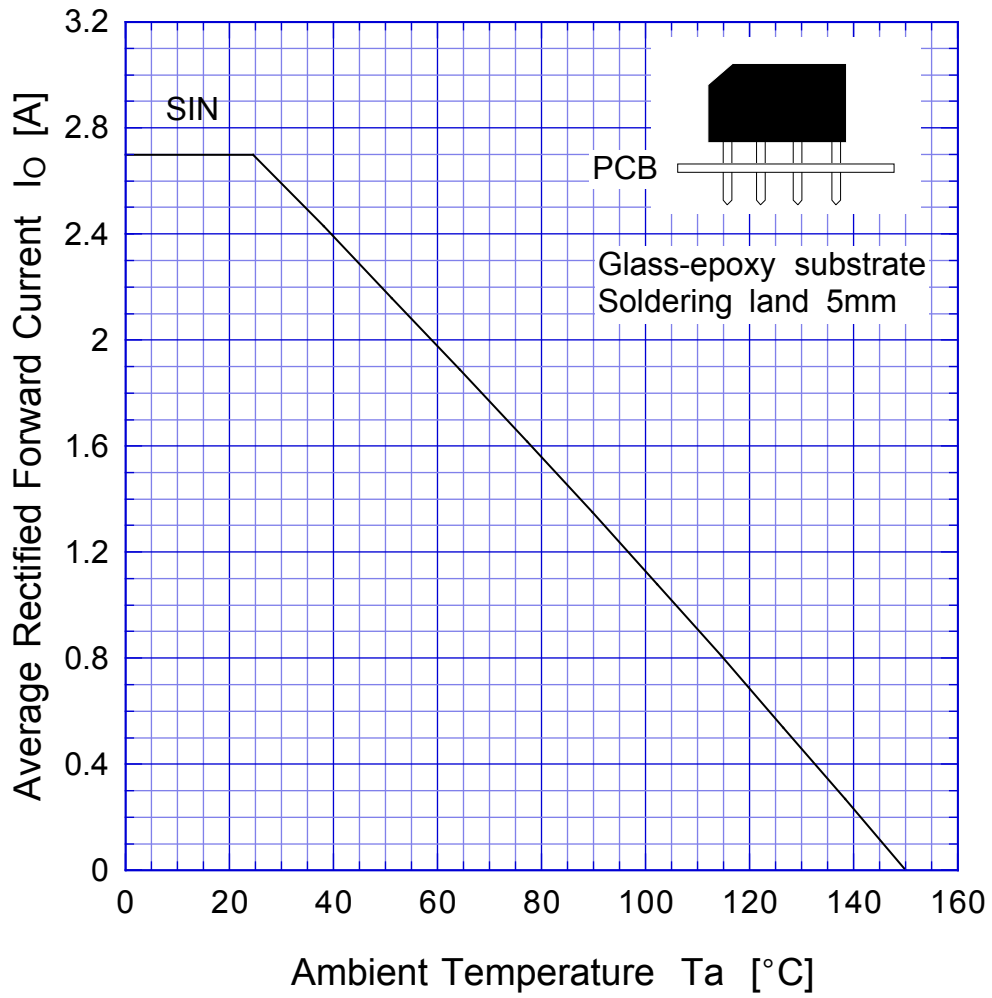
Derating Curve



Sine wave
R-load
with heatsink

D10XBx

Derating Curve



Sine wave
R-load
Free in air

D10XBx

Peak Surge Forward Capability

