

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D15XB80

800V 15A

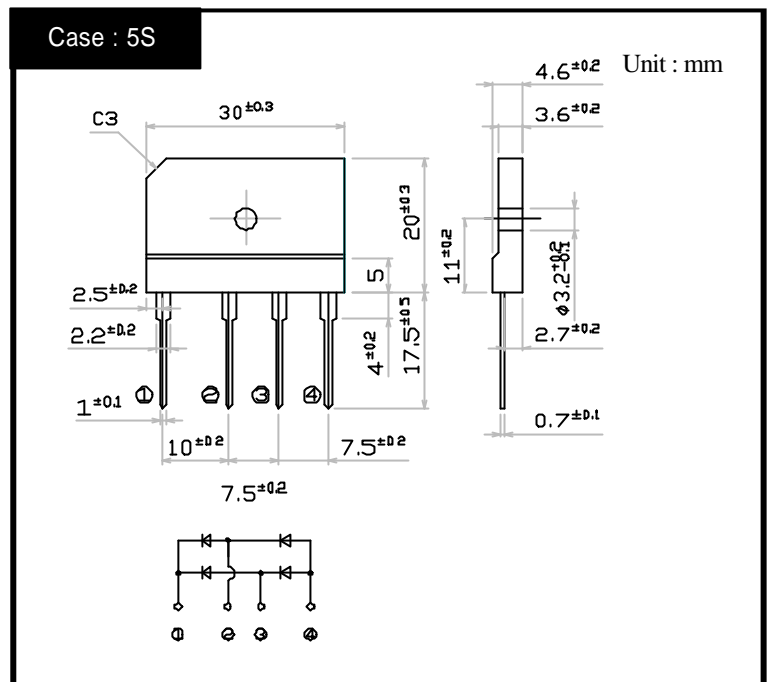
FEATURES

- 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 $T_c=25$)

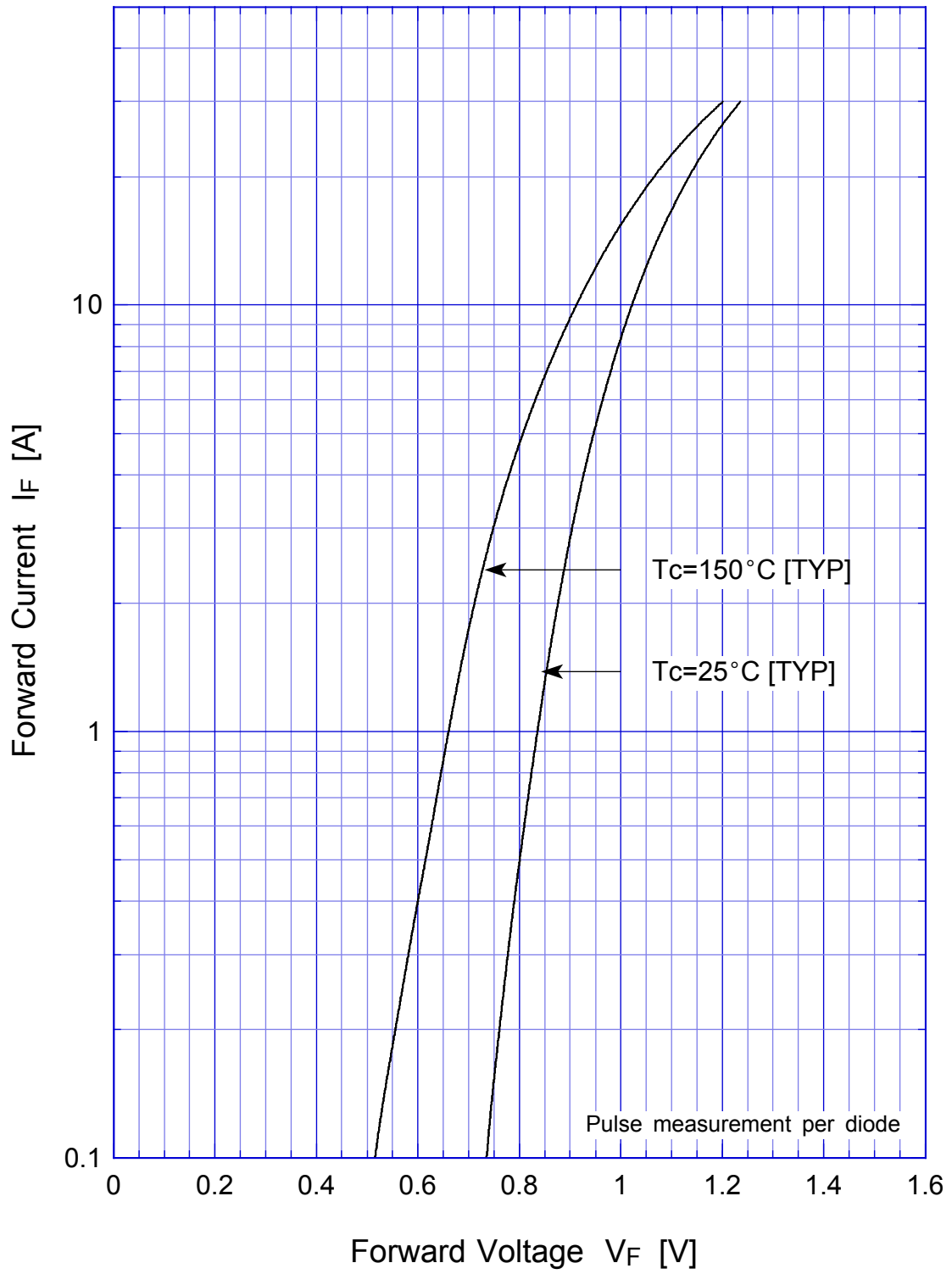
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40 ~ 150	
Operating Junction Temperature	T_j		150	
Maximum Reverse Voltage	V_{RM}		800	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink $T_c=100$	15	A
		50Hz sine wave, R-load Without heatsink $T_a=25$	3.2	
Peak Surge Forward Current	I_{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25$	200	A
Current Squared Time	I^2t	1ms $t < 10ms$ $T_j=25$	110	A^2s
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 $T_c=25$)

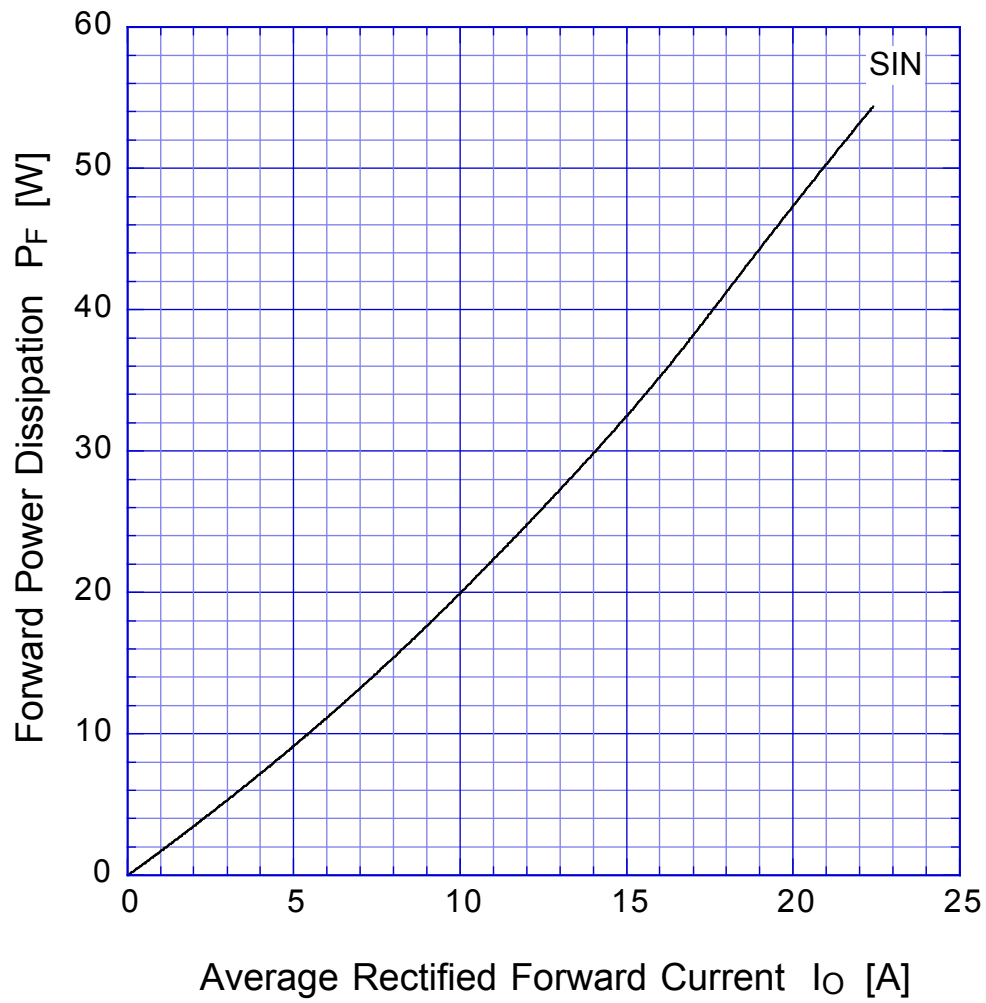
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=7.5A$, Pulse measurement, Rating of per diode	Max.1.1	V
Reverse Current	I_R	$V_R=V_{RM}$, Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	θ_{jc}	junction to case With heatsink	Max.1.5	/W
	θ_{jl}	junction to lead Without heatsink	Max.5	
	θ_{ja}	junction to ambient Without heatsink	Max.22	

D15XBx

Forward Voltage



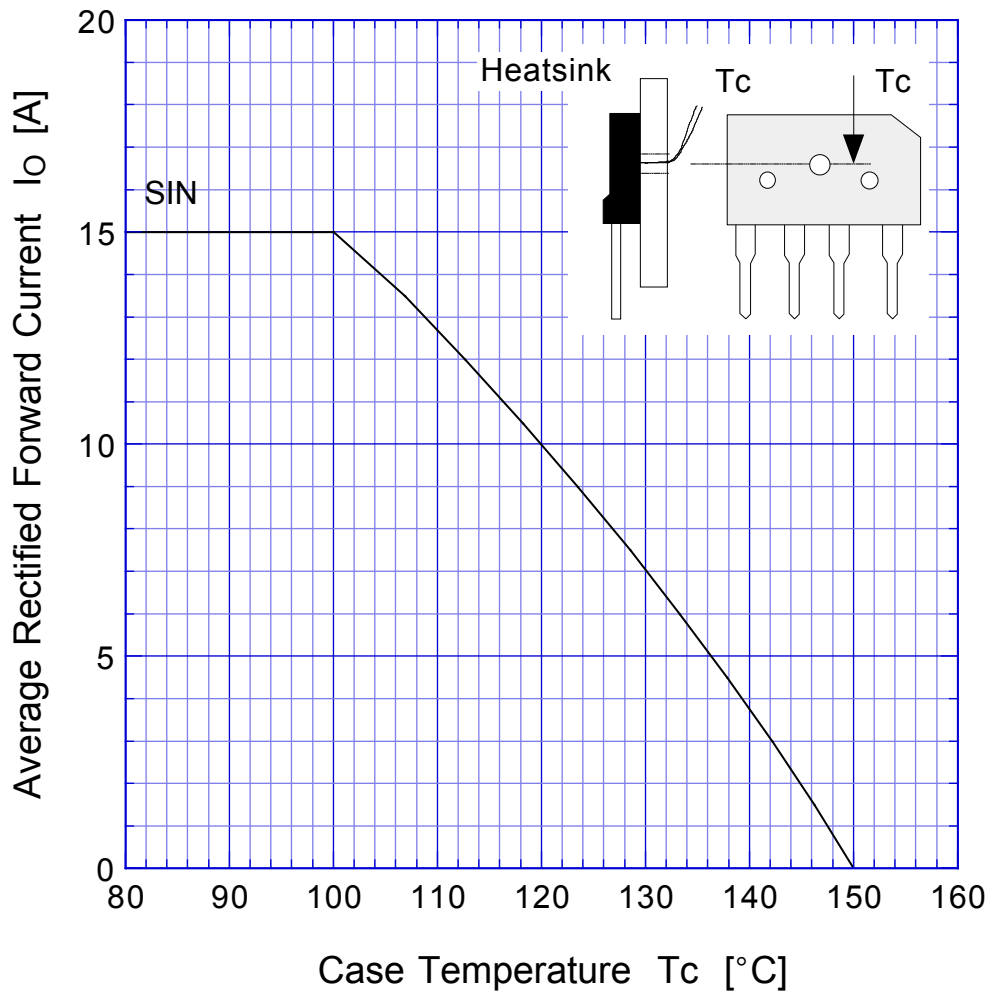
D15XBx Forward Power Dissipation



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

D15XBx

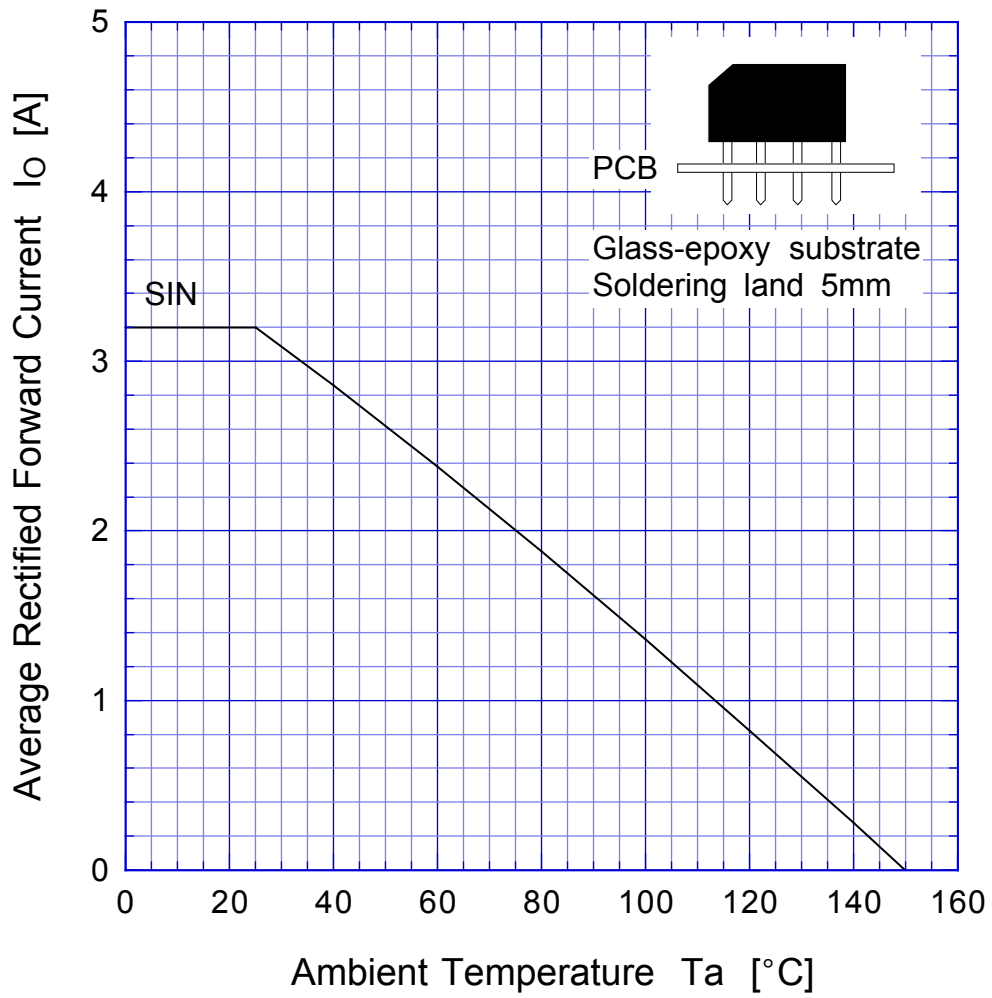
Derating Curve



Sine wave
R-load
with heatsink

D15XBx

Derating Curve



Sine wave
R-load
Free in air

D15XBx

Peak Surge Forward Capability

