

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D3SB80

800V 4A

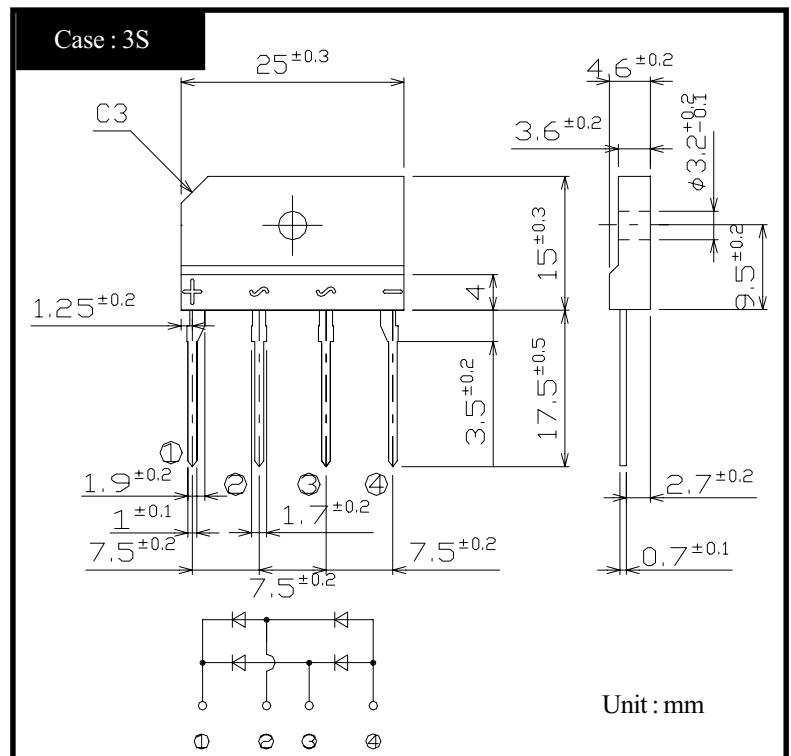
FEATURES

- Thin Single In-Line Package
- High IFSM
- Applicable to Automatic Insertion

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

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

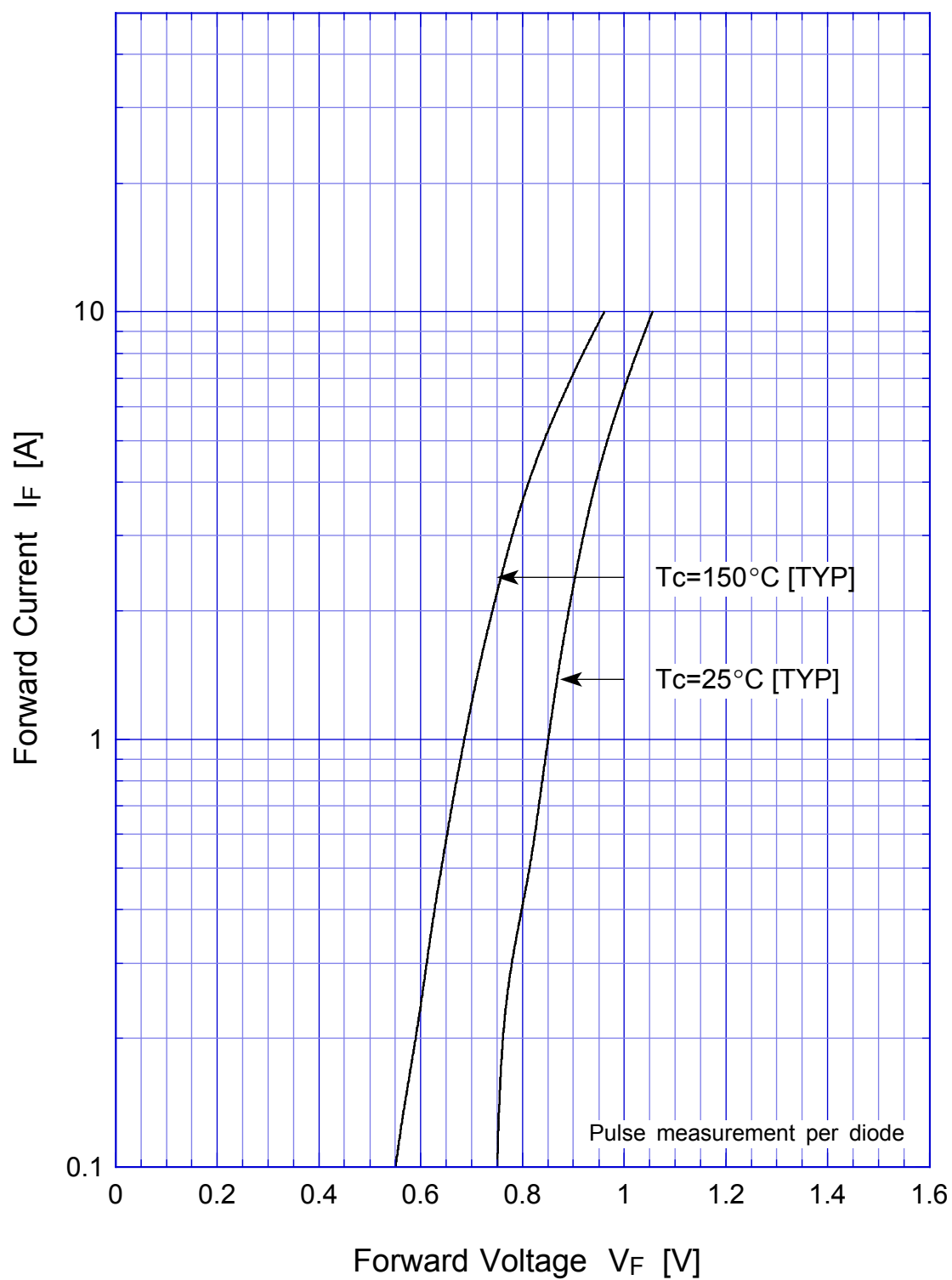
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40~150	$^\circ\text{C}$
Operating Junction Temperature	T_j		150	$^\circ\text{C}$
Maximum Reverse Voltage	V_{RM}		800	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink $T_c=108^\circ\text{C}$	4	A
		50Hz sine wave, R-load Without heatsink $T_a=25^\circ\text{C}$	2.3	
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	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	$I_F=2\text{A}$, Pulse measurement, Rating of per diode	Max.1.05	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.5.5	$^\circ\text{C}/\text{W}$
	θ_{jl}	junction to lead Without heatsink	Max.6	
	θ_{ja}	junction to ambient Without heatsink	Max.30	

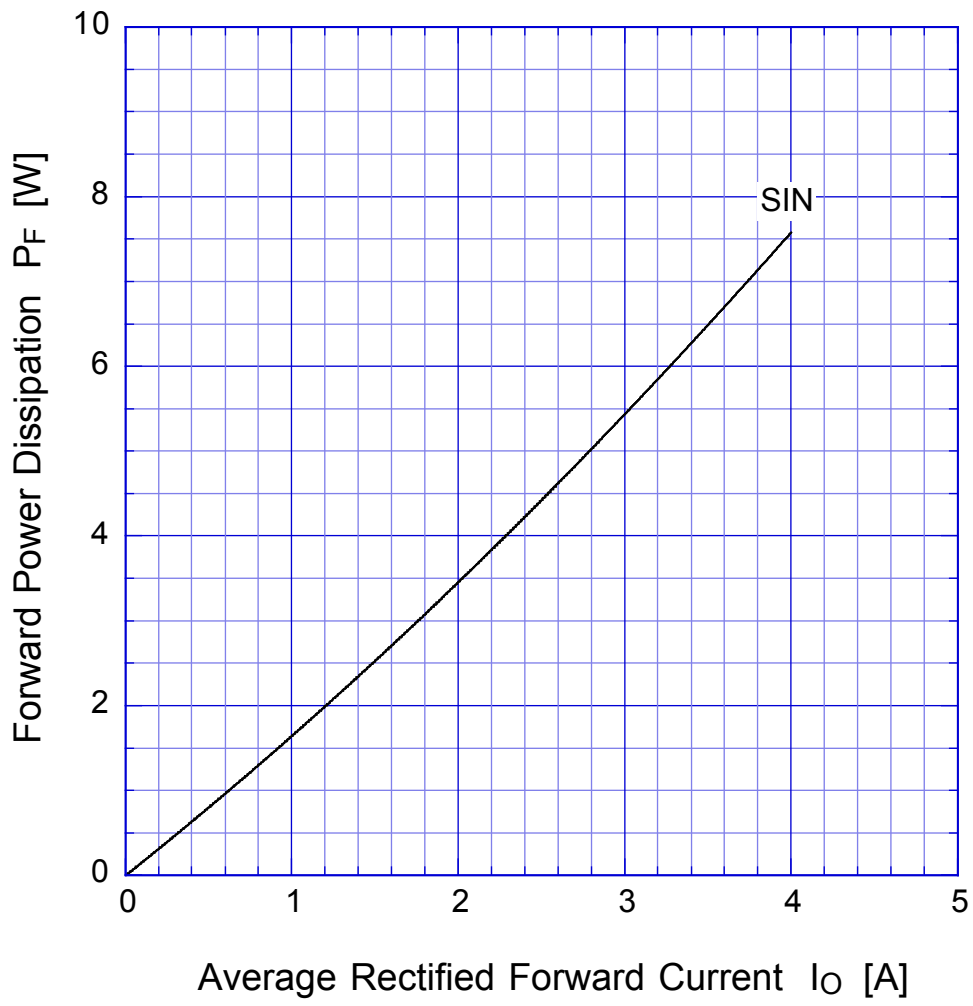
D3SBx

Forward Voltage



D3SBx

Forward Power Dissipation

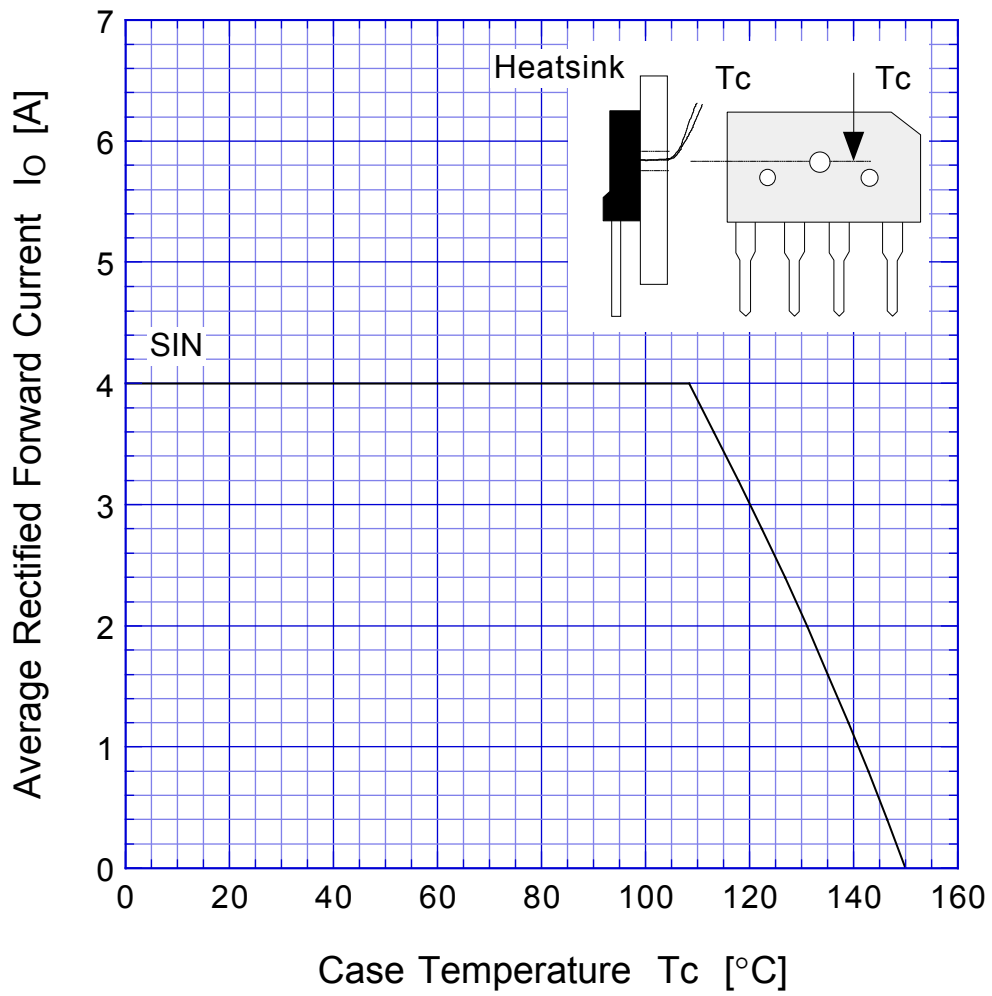


$T_j = 150^\circ\text{C}$

Sine wave

D3SBx

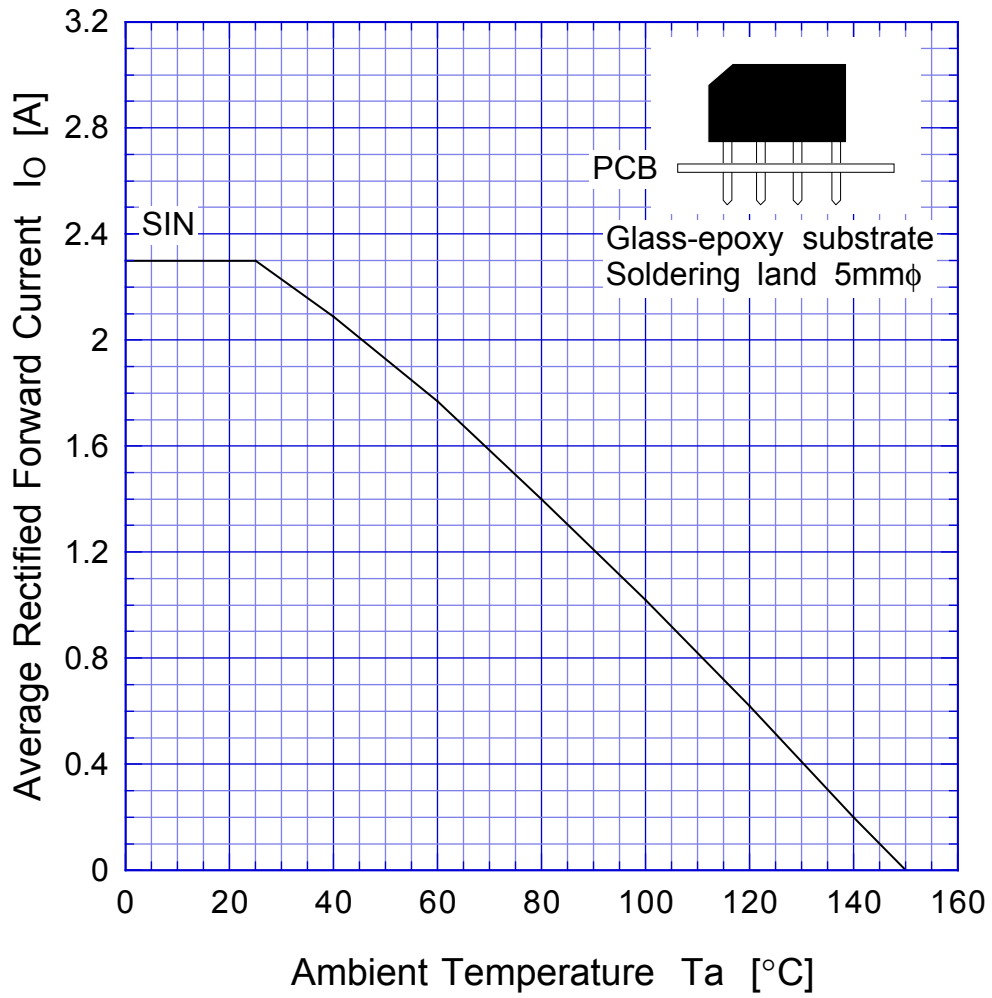
Derating Curve



Sine wave
R-load
with heatsink

D3SBx

Derating Curve



Sine wave
R-load
Free in air

D3SBx

Peak Surge Forward Capability

