

# SHINDENGEN

## General Purpose Rectifiers

SIL Bridges

# D3SB80

## 800V 4A

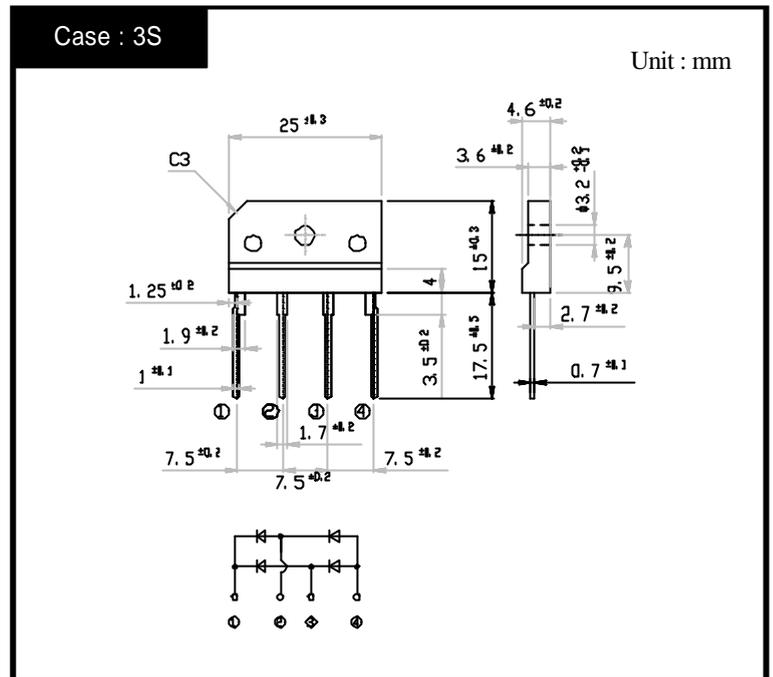
### FEATURES

- 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  $T_c=25$  )

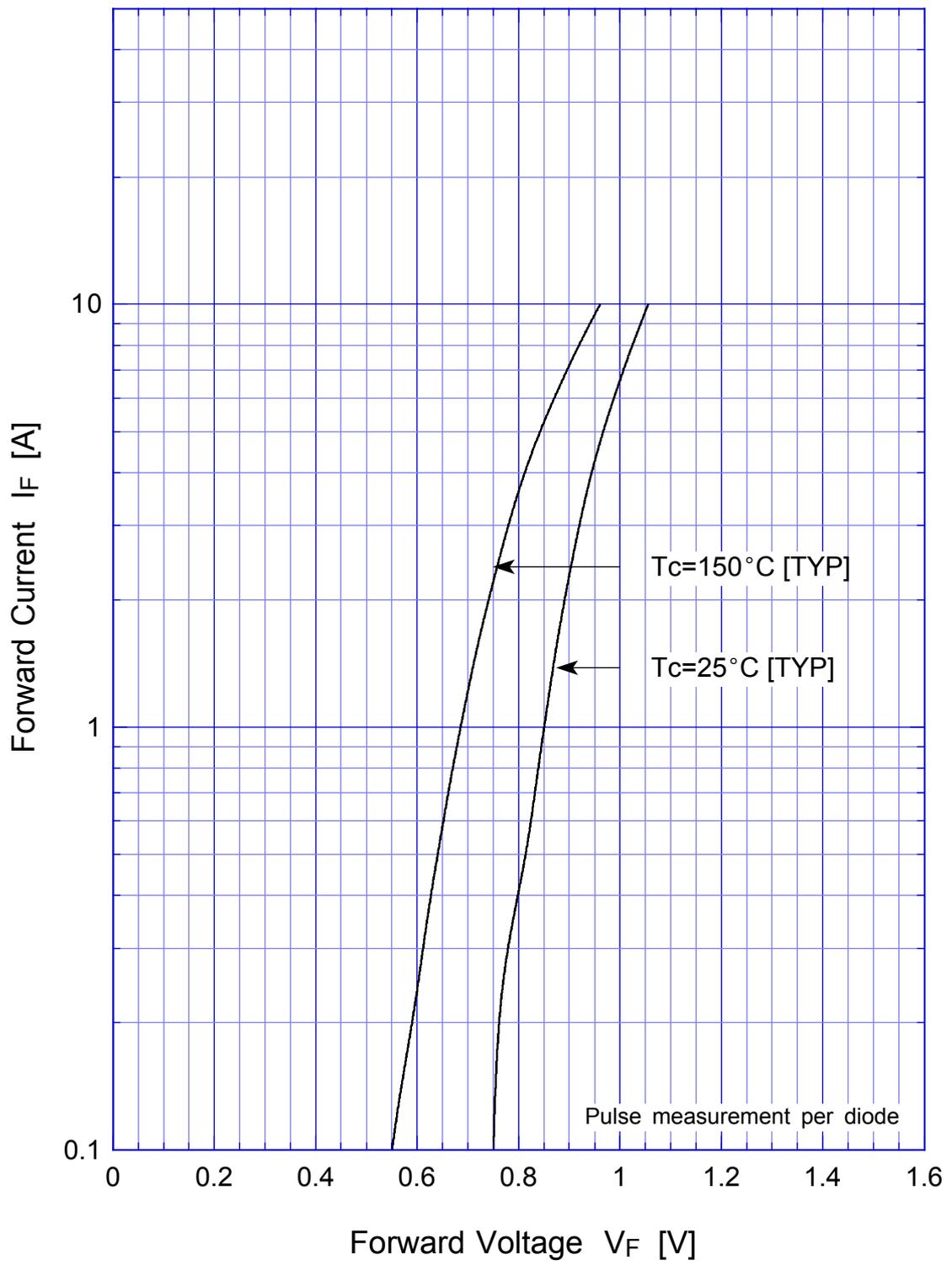
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		800	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load With heatsink $T_c=108$	4	A
		50Hz sine wave, R-load Without heatsink $T_a=25$	2.3	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25$	120	A
Current Squared Time	$I^2t$	1ms $t < 10ms$ $T_j=25$	60	$A^2s$
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2	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	$V_F$	$I_F=2A$ , 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	$\mu A$
Thermal Resistance	$\theta_{jc}$	junction to case With heatsink	Max.5.5	/W
	$\theta_{jl}$	junction to lead Without heatsink	Max.6	
	$\theta_{ja}$	junction to ambient Without heatsink	Max.30	

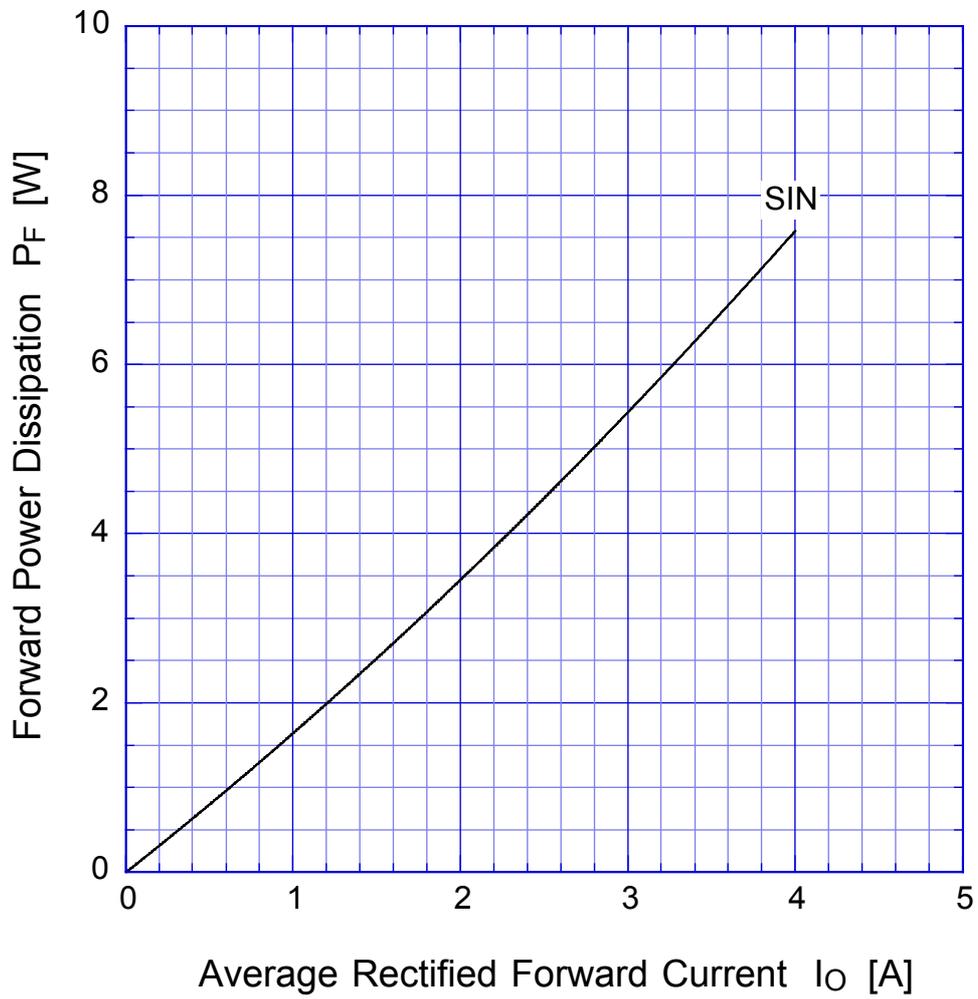
D3SBx

Forward Voltage



D3SBx

Forward Power Dissipation

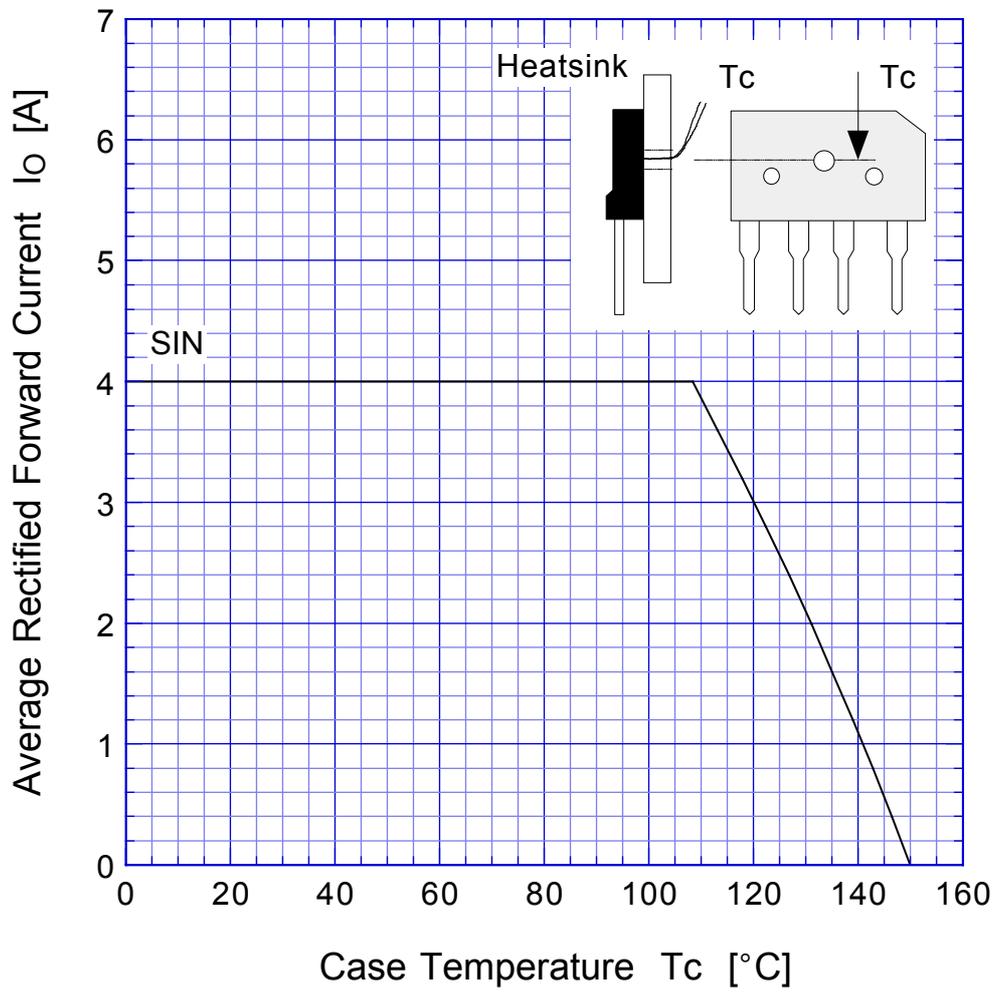


$T_j = 150^\circ\text{C}$

Sine wave

# D3SBx

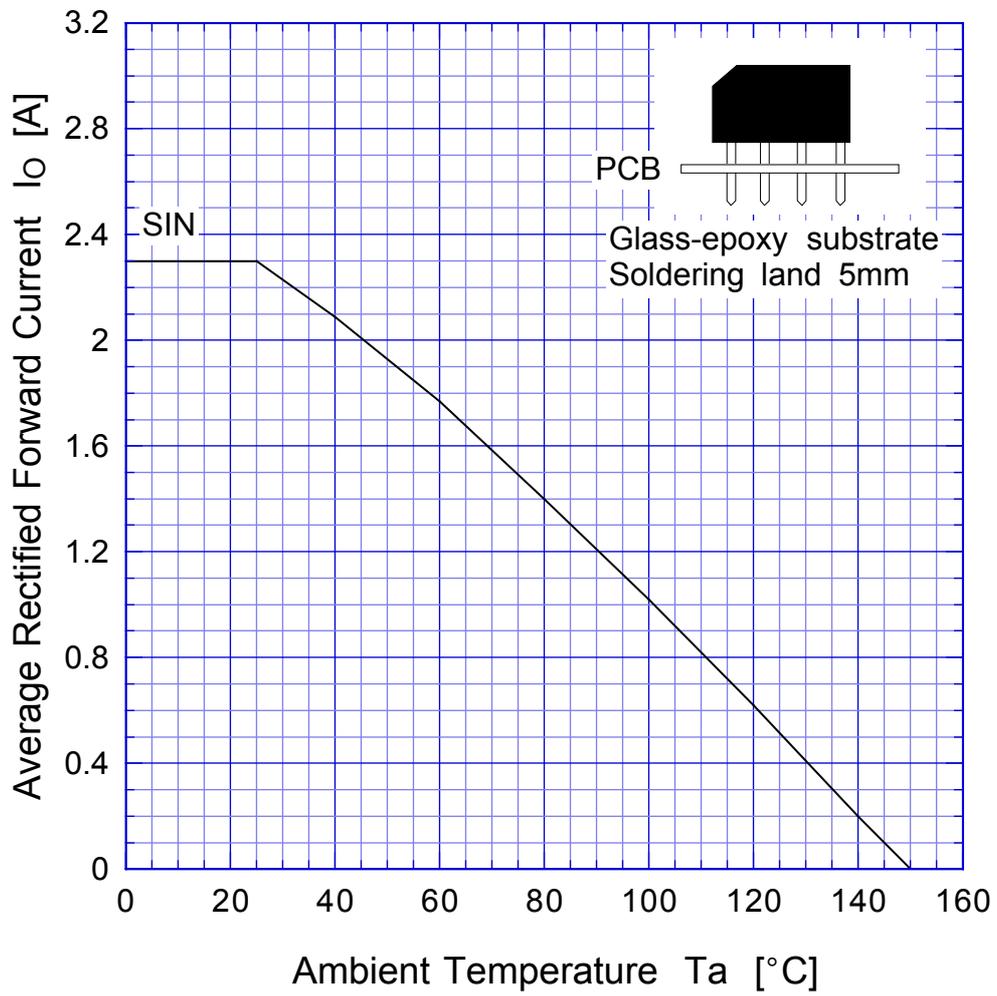
# Derating Curve



Sine wave  
R-load  
with heatsink

# D3SBx

## Derating Curve



Sine wave  
R-load  
Free in air

# D3SBx

## Peak Surge Forward Capability

