

# SHINDENGEN

## General Purpose Rectifiers

SIL Bridges

# D3SBA60

## 600V 4A

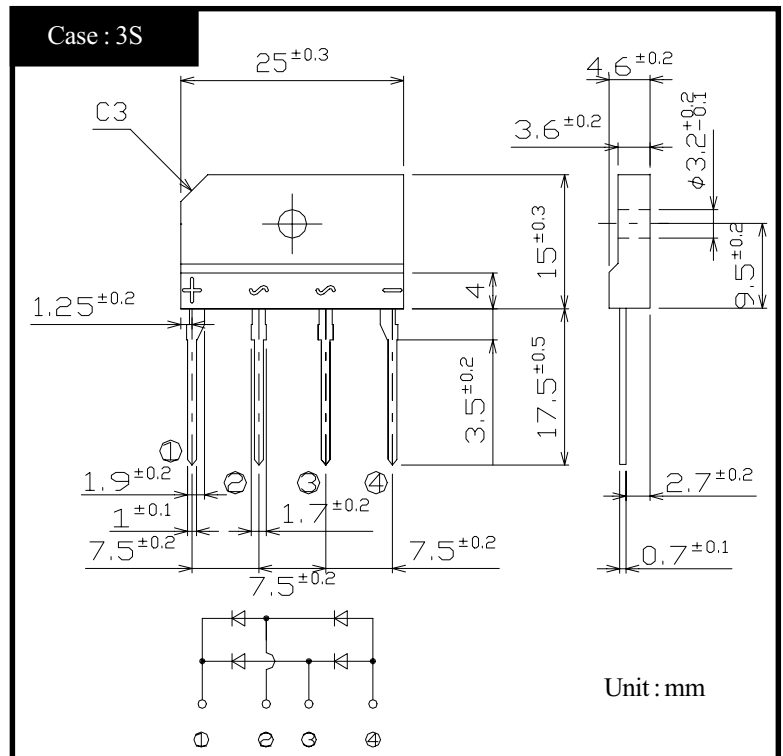
### FEATURES

- 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 $T_c=25^\circ\text{C}$ )

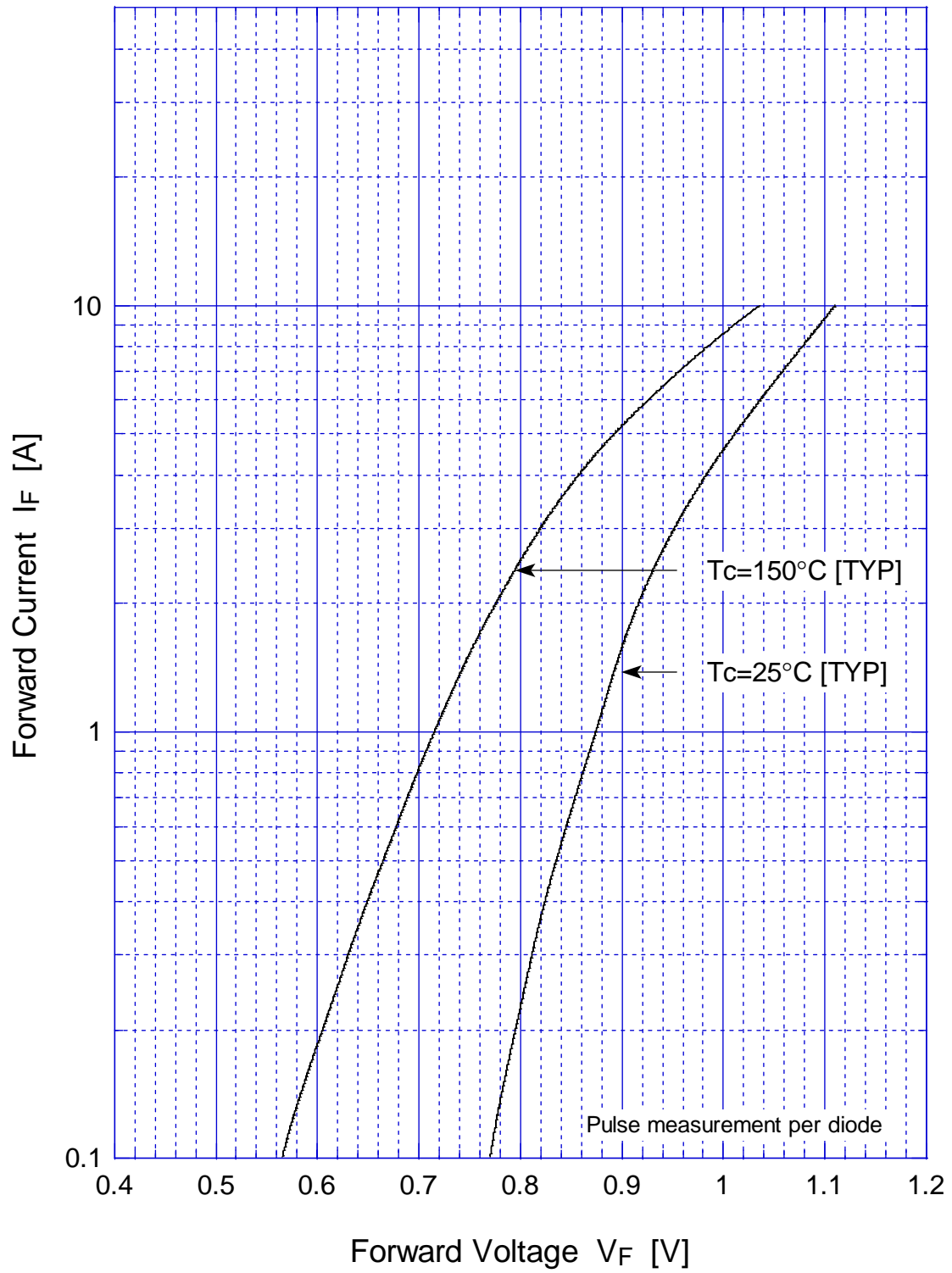
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40~150	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		150	$^\circ\text{C}$
Maximum Reverse Voltage	$V_{RM}$		600	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load With heatsink $T_c=108^\circ\text{C}$	4	A
		50Hz 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 1 cycle peak value, $T_j=25^\circ\text{C}$	80	A
Current Squared Time	$I^2t$	$1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$	32	$\text{A}^2\text{s}$
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 $T_c=25^\circ\text{C}$ )

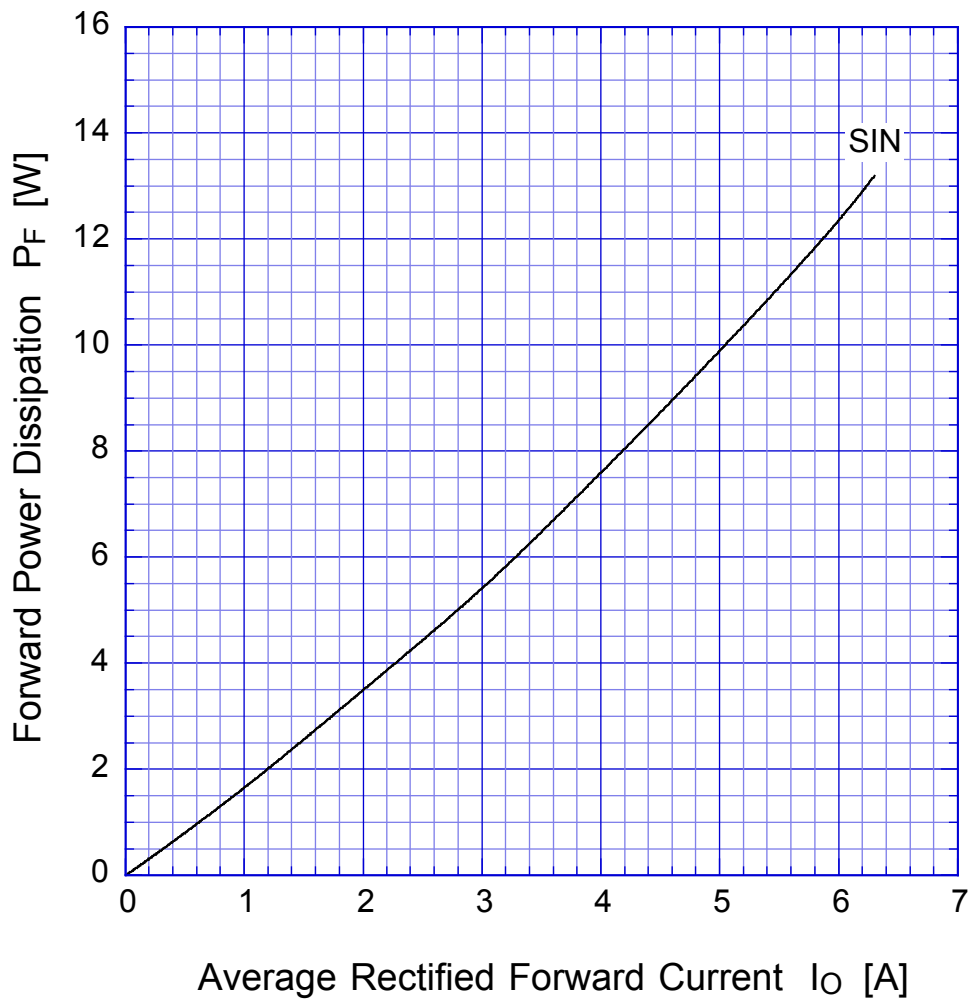
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=2\text{A}$ , Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.10	$\mu\text{A}$
Thermal Resistance	$\theta_{jc}$	junction to case With heatsink	Max.5.5	$^\circ\text{C}/\text{W}$
	$\theta_{jl}$	junction to lead Without heatsink	Max.6	
	$\theta_{ja}$	junction to ambient Without heatsink	Max.30	

D3SBAx

Forward Voltage



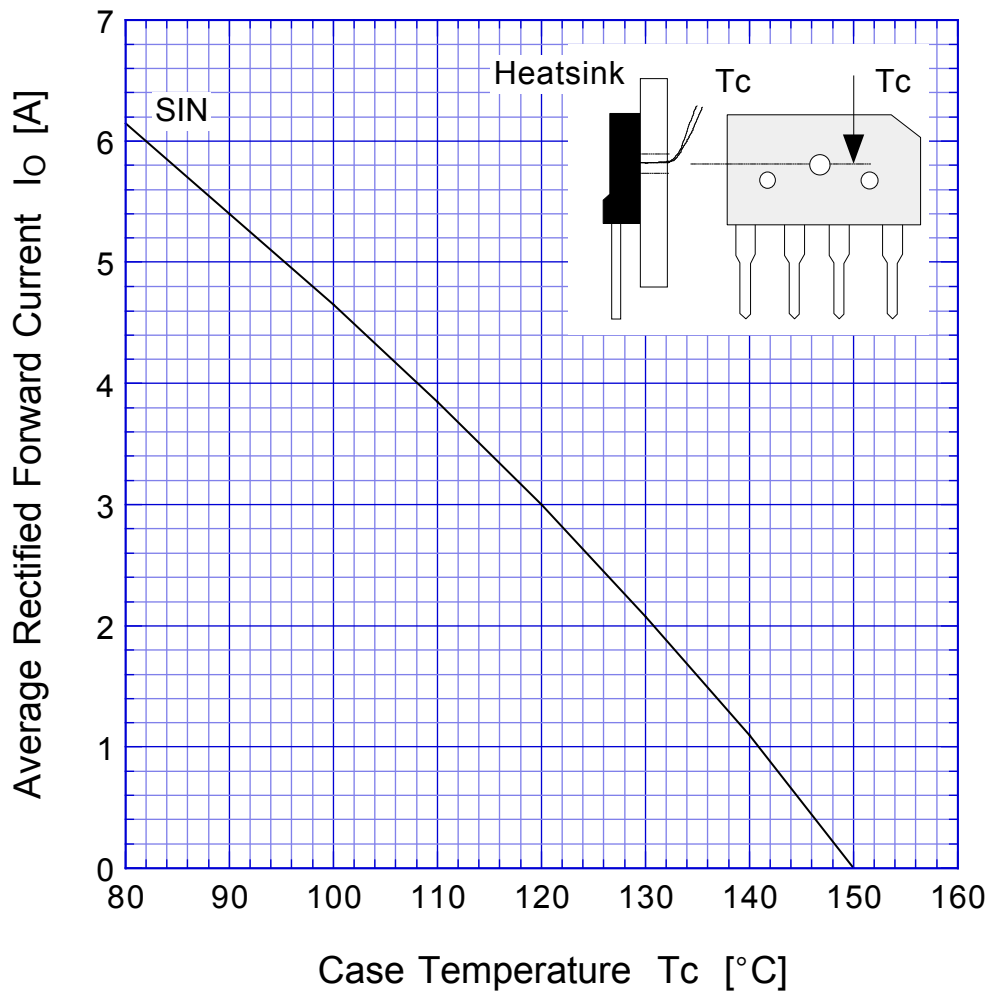
## D3SBAx Forward Power Dissipation



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

# D3SBAx

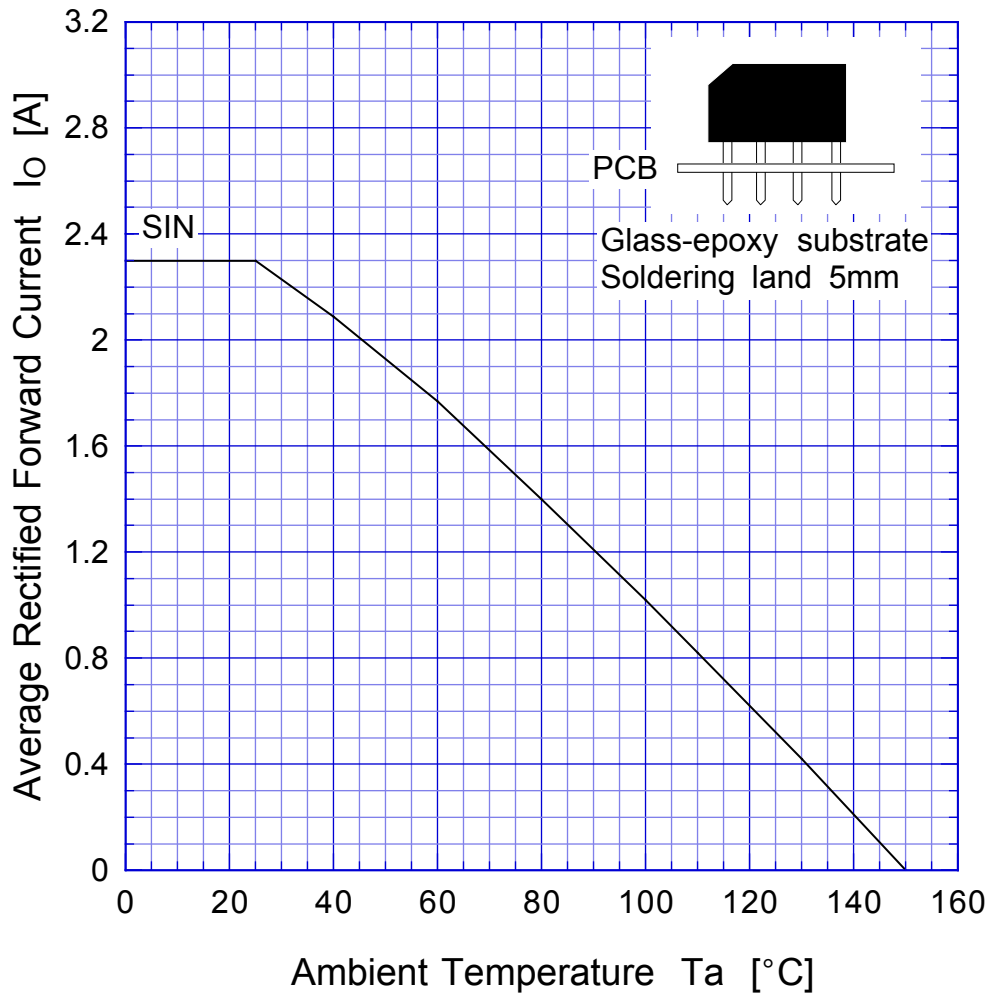
# Derating Curve



Sine wave  
R-load  
with heatsink

# D3SBAx

# Derating Curve



Sine wave  
R-load  
Free in air

# D3SBAx

## Peak Surge Forward Capability

