

# SHINDENGEN

## General Purpose Rectifiers

SIL Bridges

**D5SB20**

**200V 6A**

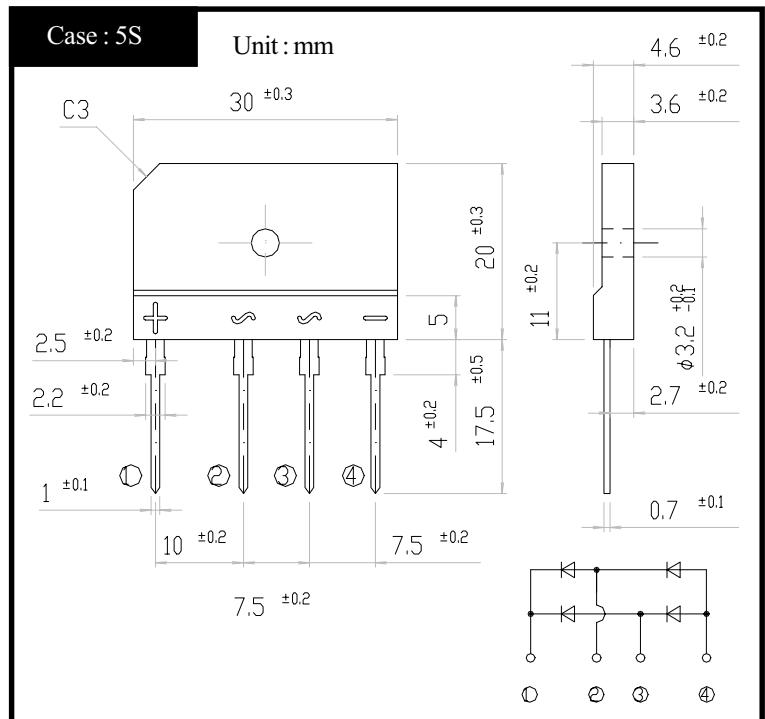
### FEATURES

- 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 Tc=25°C)

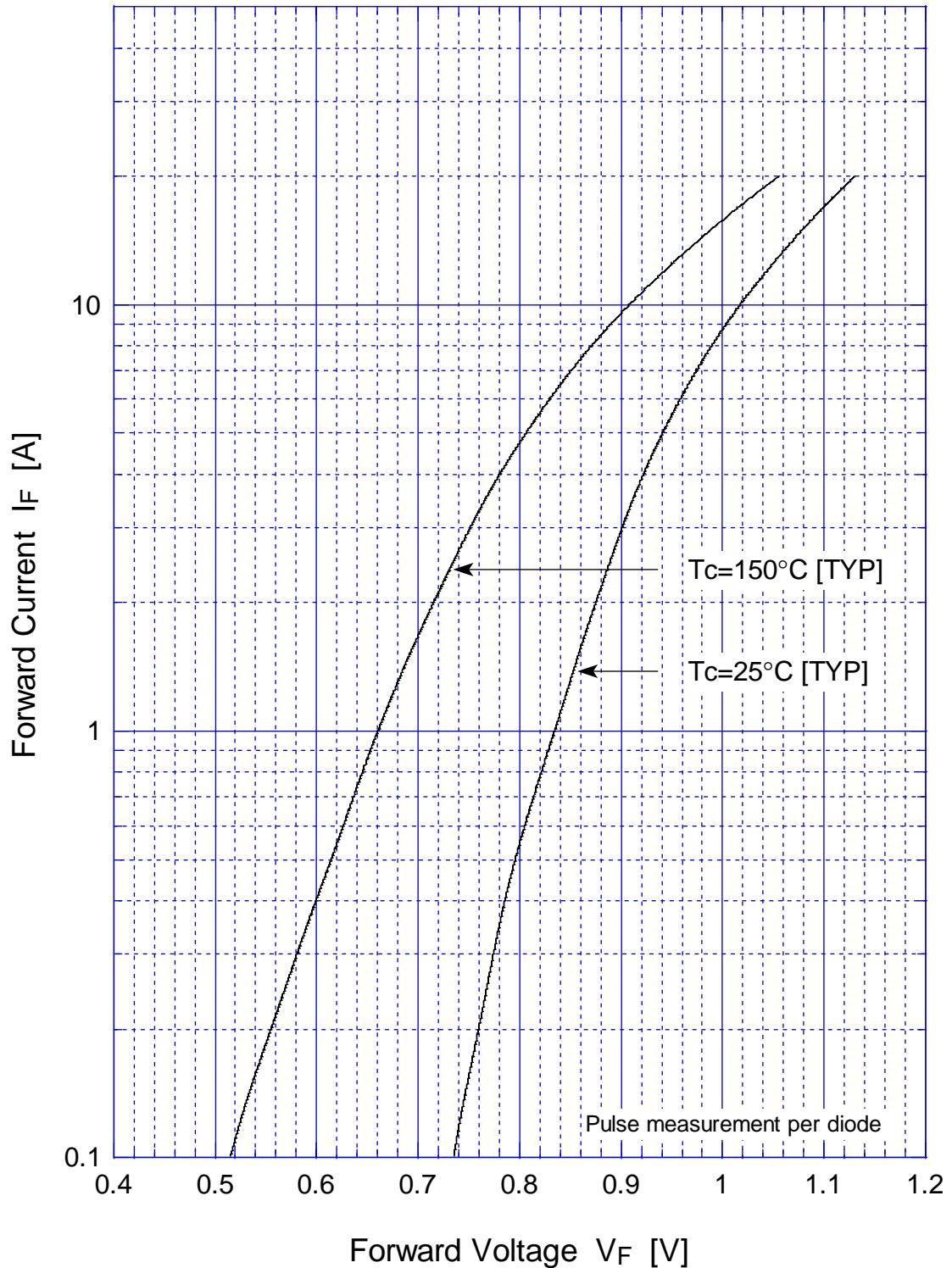
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T <sub>stg</sub>		-40~150	°C
Operating Junction Temperature	T <sub>j</sub>		150	°C
Maximum Reverse Voltage	V <sub>RM</sub>		200	V
Average Rectified Forward Current	I <sub>O</sub>	50Hz sine wave, R-load With heatsink T <sub>c</sub> =111°C 50Hz sine wave, R-load Without heatsink T <sub>a</sub> =25°C	6 2.8	A
Peak Surge Forward Current	I <sub>FSM</sub>	50Hz sine wave, Non-repetitive 1cycle peak value, T <sub>j</sub> =25°C	170	A
Current Squared Time	I <sup>2</sup> t	2ms≤t<10ms T <sub>j</sub> =25°C	140	A <sup>2</sup> s
Dielectric Strength	V <sub>dis</sub>	Terminals to case, AC 1 minute	2	kV
Mounting Torque	T <sub>OR</sub>	(Recommended torque:0.5N·m)	0.8	N·m

#### ● Electrical Characteristics (If not specified Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V <sub>F</sub>	I <sub>f</sub> =3A, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =V <sub>RM</sub> , Pulse measurement, Rating of per diode	Max.10	μA
Thermal Resistance	θ <sub>jc</sub>	junction to case With heatsink	Max.3.4	
	θ <sub>jl</sub>	junction to lead Without heatsink	Max.5	°C/W
	θ <sub>ja</sub>	junction to ambient Without heatsink	Max.26	

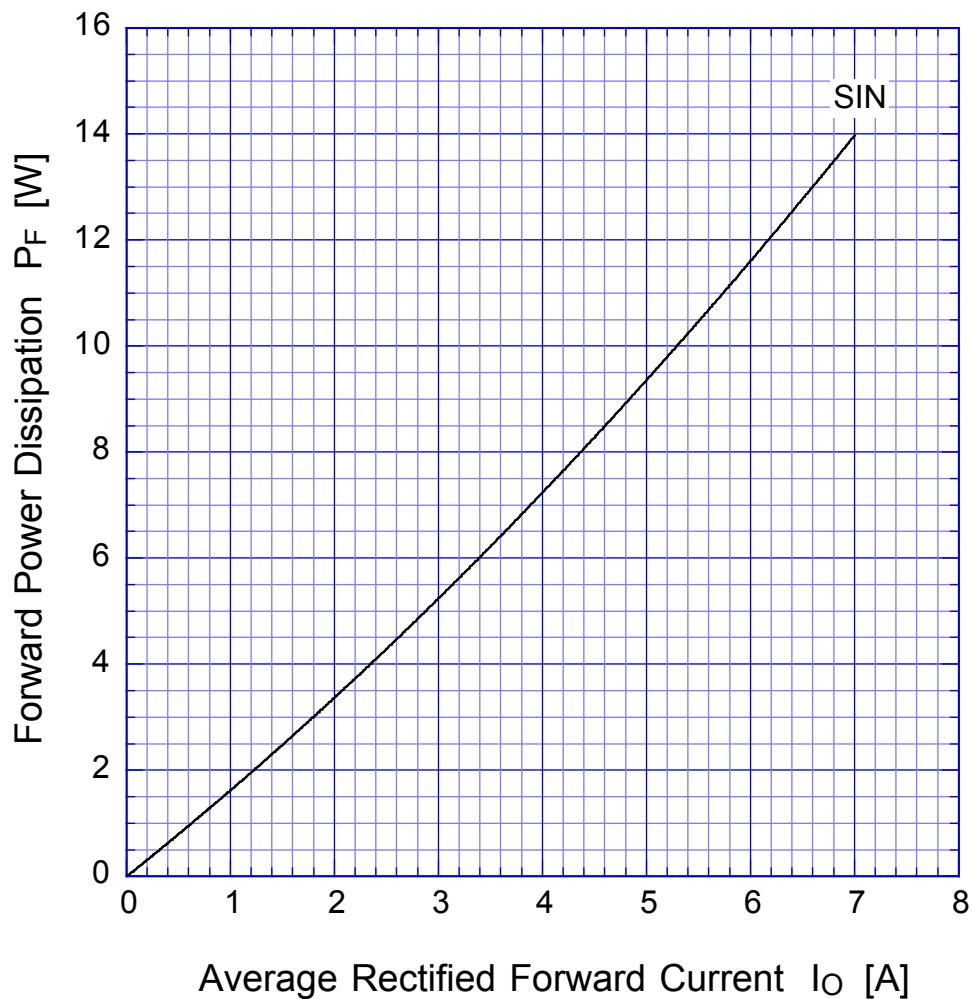
D5SBx

Forward Voltage



D5SBx

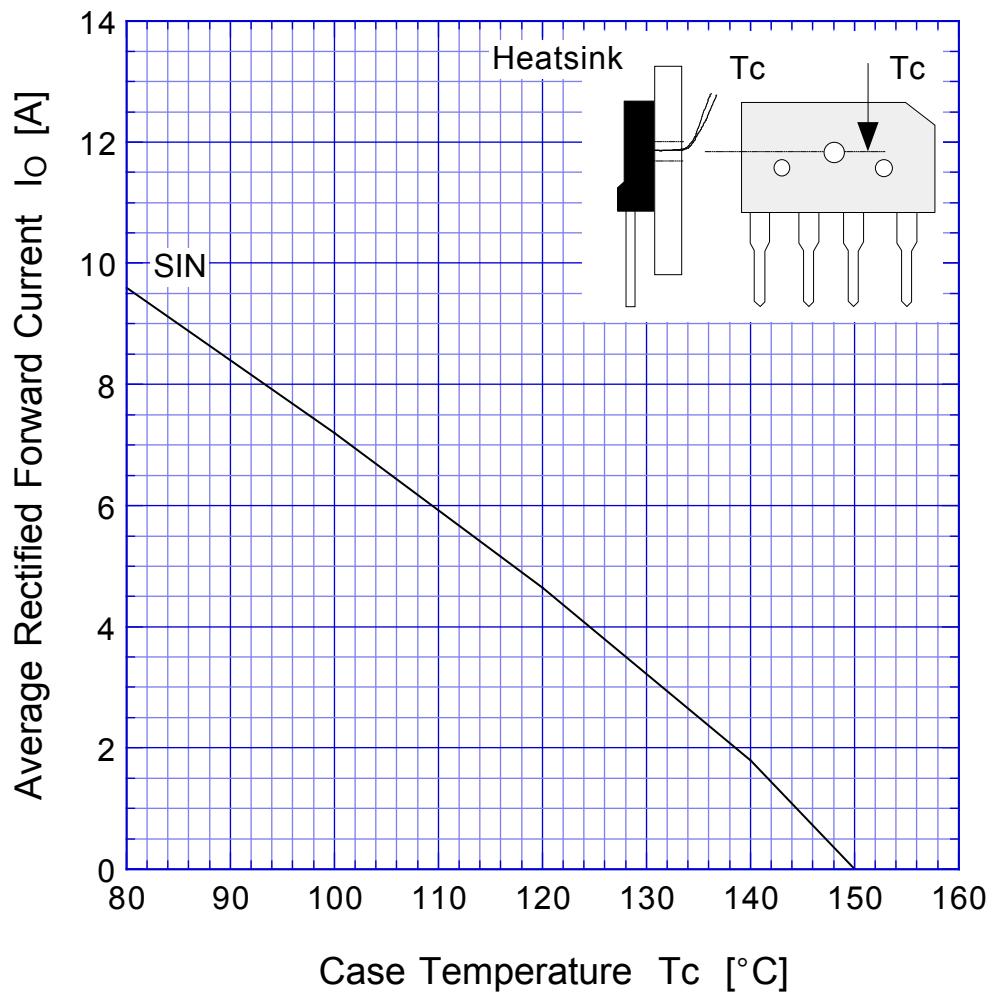
Forward Power Dissipation



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

# D5SBx

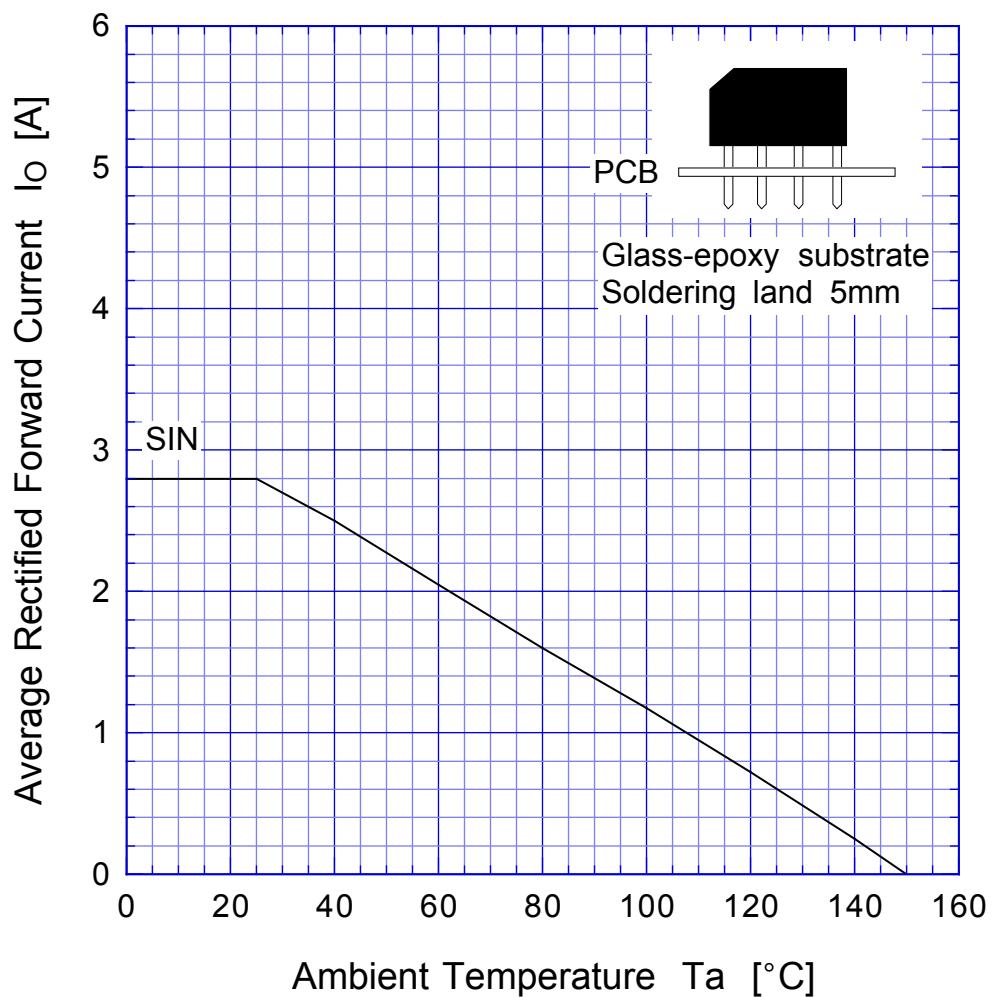
## Derating Curve



Sine wave  
R-load  
with heatsink

D5SBx

Derating Curve



Sine wave

R-load

Free in air

# D5SBx

## Peak Surge Forward Capability

