

# SHINDENGEN

## General Purpose Rectifiers

SIL Bridges

# D6SB80

## 800V 6A

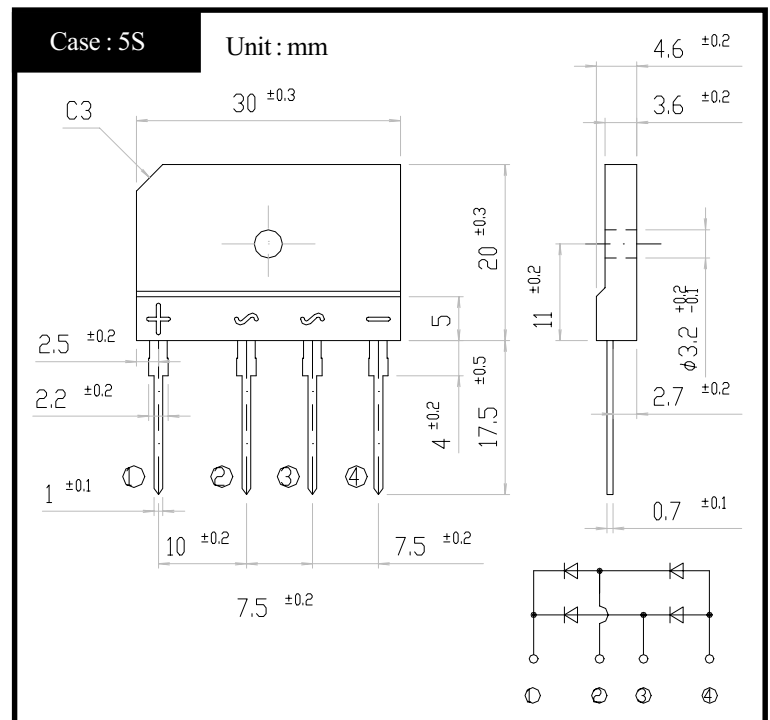
### FEATURES

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

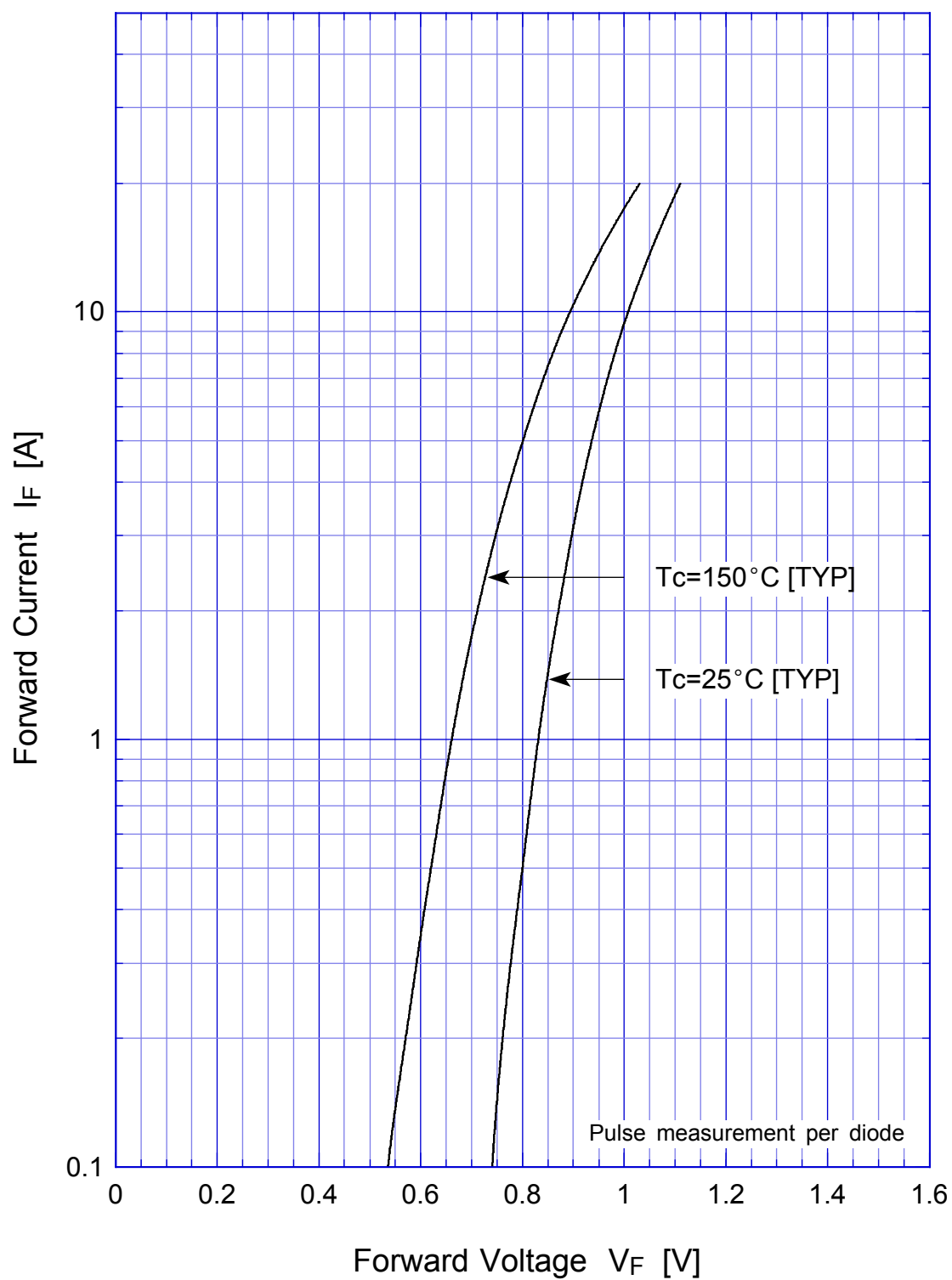
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40~150	$^\circ\text{C}$
Operating Junction Temperature	$T_j$		150	$^\circ\text{C}$
Maximum Reverse Voltage	$V_{RM}$		800	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load With heatsink $T_c=110^\circ\text{C}$	6	A
		50Hz sine wave, R-load Without heatsink $T_a=25^\circ\text{C}$	2.8	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25^\circ\text{C}$	170	A
Current Squared Time	$I^2t$	$2\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$	140	$\text{A}^2\text{s}$
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2.5	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	$V_F$	$I_F=3.0\text{A}$ , 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. 3.4	$^\circ\text{C}/\text{W}$
	$\theta_{jl}$	junction to lead Without heatsink	Max. 5	
	$\theta_{ja}$	junction to ambient Without heatsink	Max. 26	
	$\theta_{cf}$	case to heatsink, Mounting torque $0.5\text{N}\cdot\text{m}$	Max. 2	

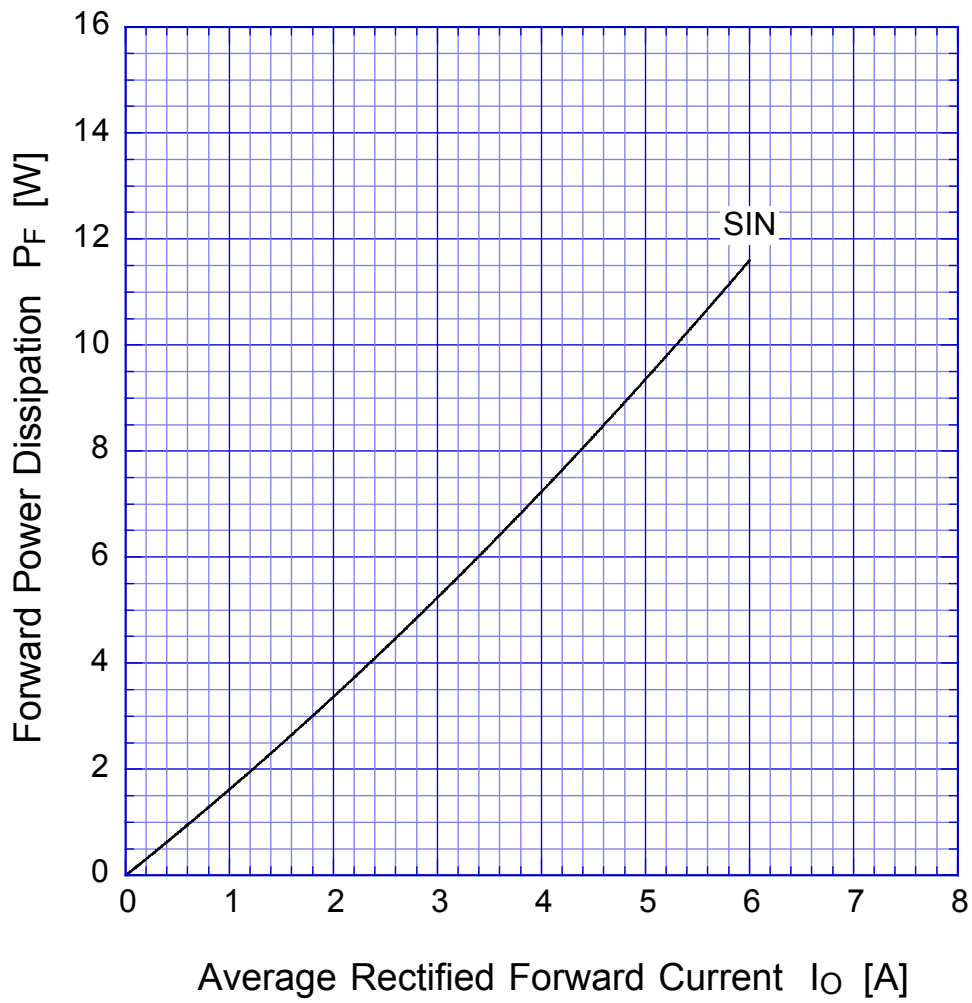
# D6SB80

## Forward Voltage



D6SB80

Forward Power Dissipation

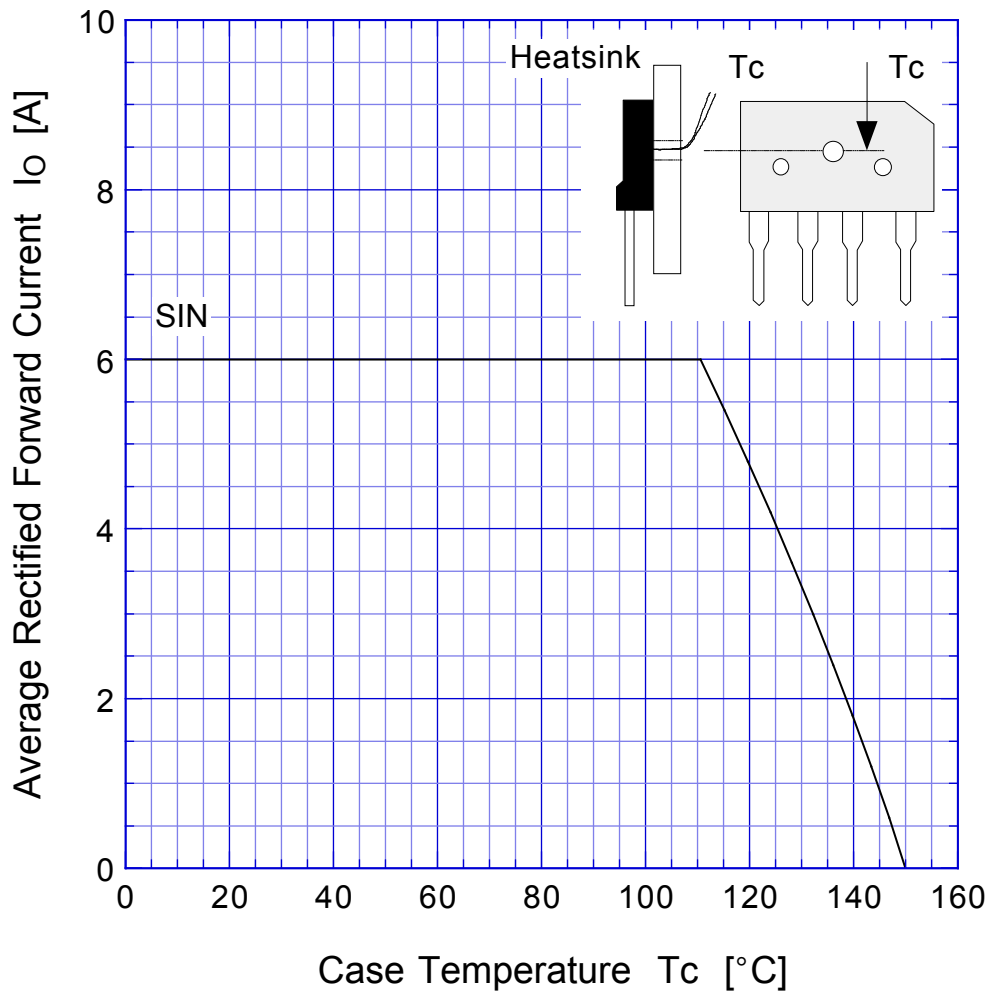


$T_j = 150^\circ\text{C}$

Sine wave

# D6SB80

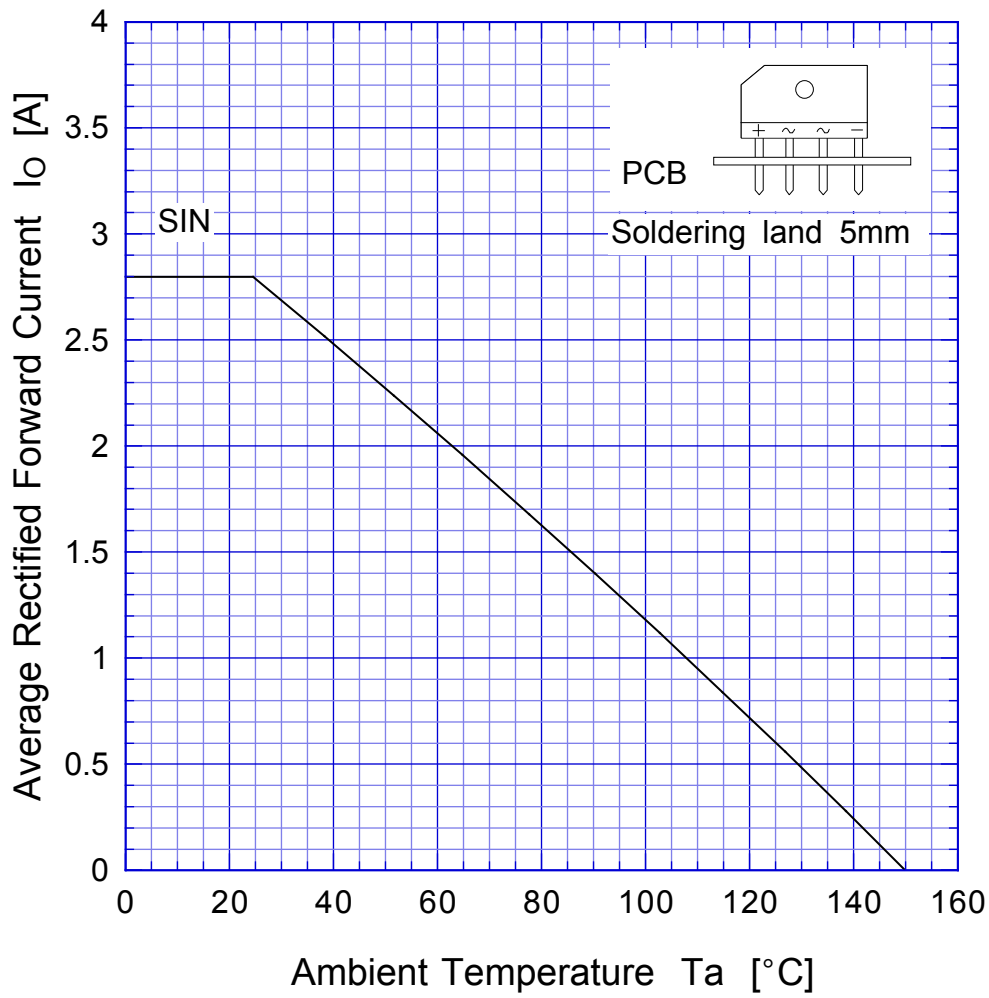
## Derating Curve



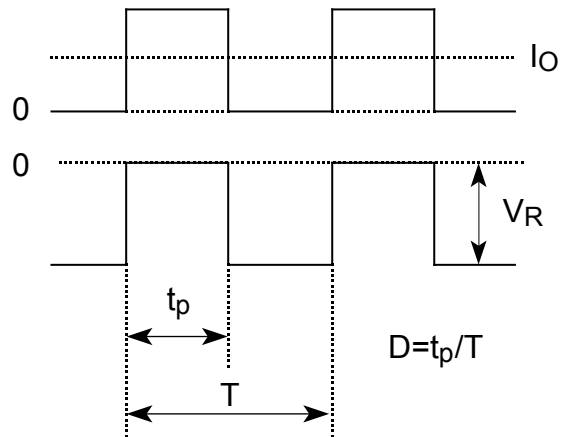
Sine wave  
R-load  
with heatsink

# D6SB80

# Derating Curve



$V_R = 600V$



# D6SB80

## Peak Surge Forward Capability

