

# SHINDENGEN

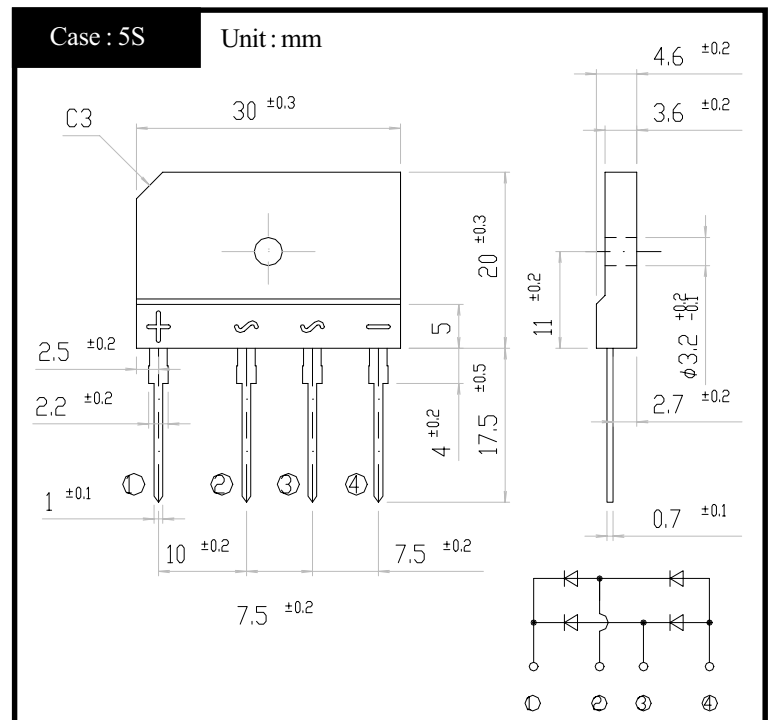
## General Purpose Rectifiers

SIL Bridges

# D6SB60L

## 600V 6A

### OUTLINE DIMENSIONS



### RATINGS

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

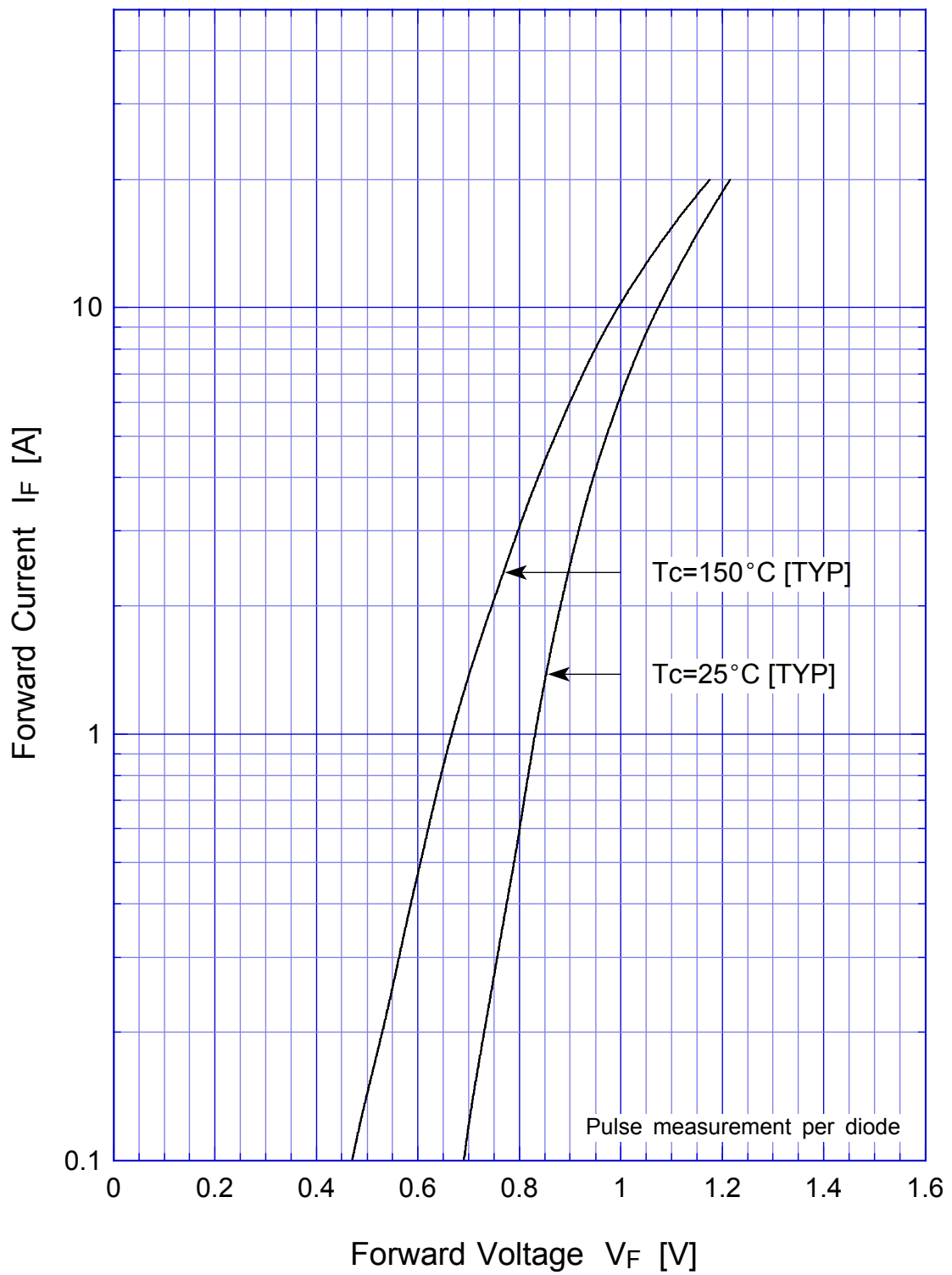
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40~150	$^{\circ}\text{C}$
Operating Junction Temperature	$T_j$		150	$^{\circ}\text{C}$
Maximum Reverse Voltage	$V_{RM}$		600	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load With heatsink $T_c=112^{\circ}\text{C}$	6	A
		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, $T_I=25^{\circ}\text{C}$	170	A
Current Squared Time	$I^2t$	$2\text{ms} \leq t < 10\text{ms}$ $T_j = 25^{\circ}\text{C}$	90	$\text{A}^2\text{s}$
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2.5	kV
Mounting Torque	TOR	(Recommended torque : 0.5N·m)	0.8	N·m

#### ● Electrical Characteristics (If not specified $T_I=25^{\circ}\text{C}$ )

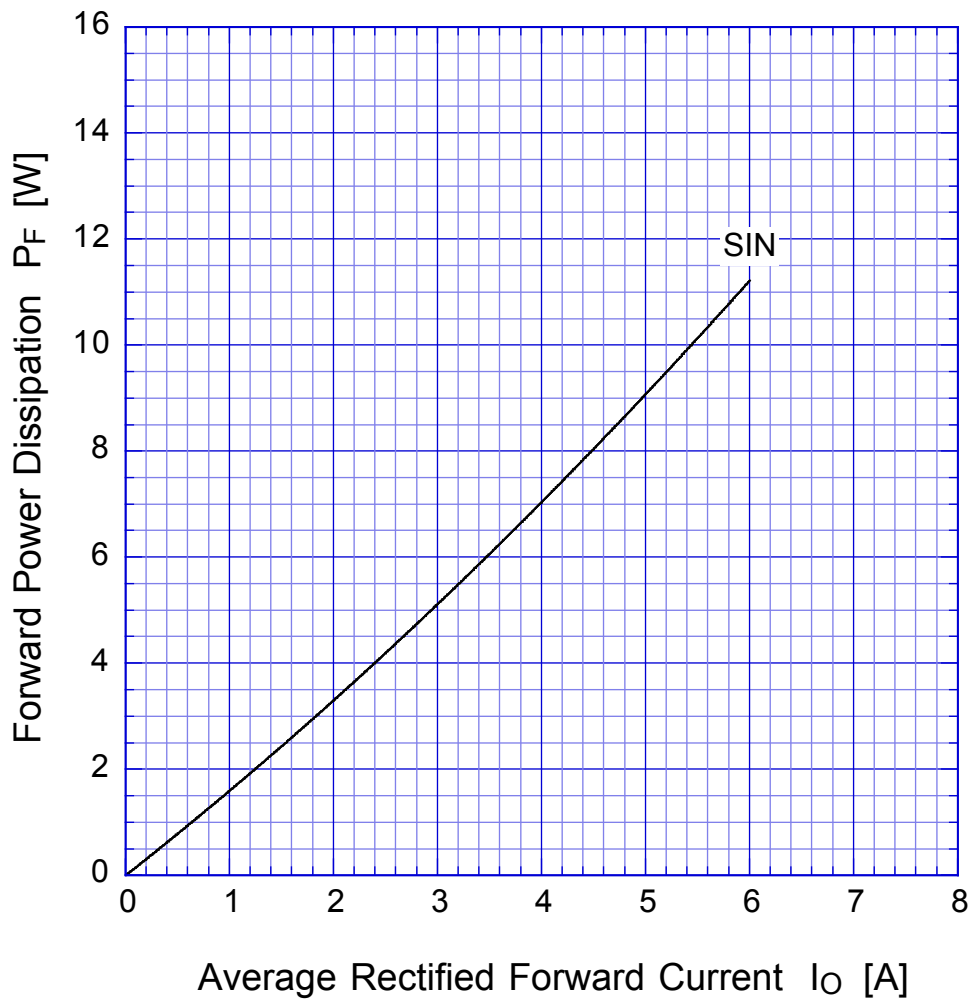
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=3\text{A}$ , Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max.10	$\mu\text{A}$
Reverse Recovery Time	$t_{rr}$	$I_F=0.1\text{A}$ , $I_R=0.1\text{A}$ Rating of per diode	Max.10	$\mu\text{s}$
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	

# D6SB60L

## Forward Voltage



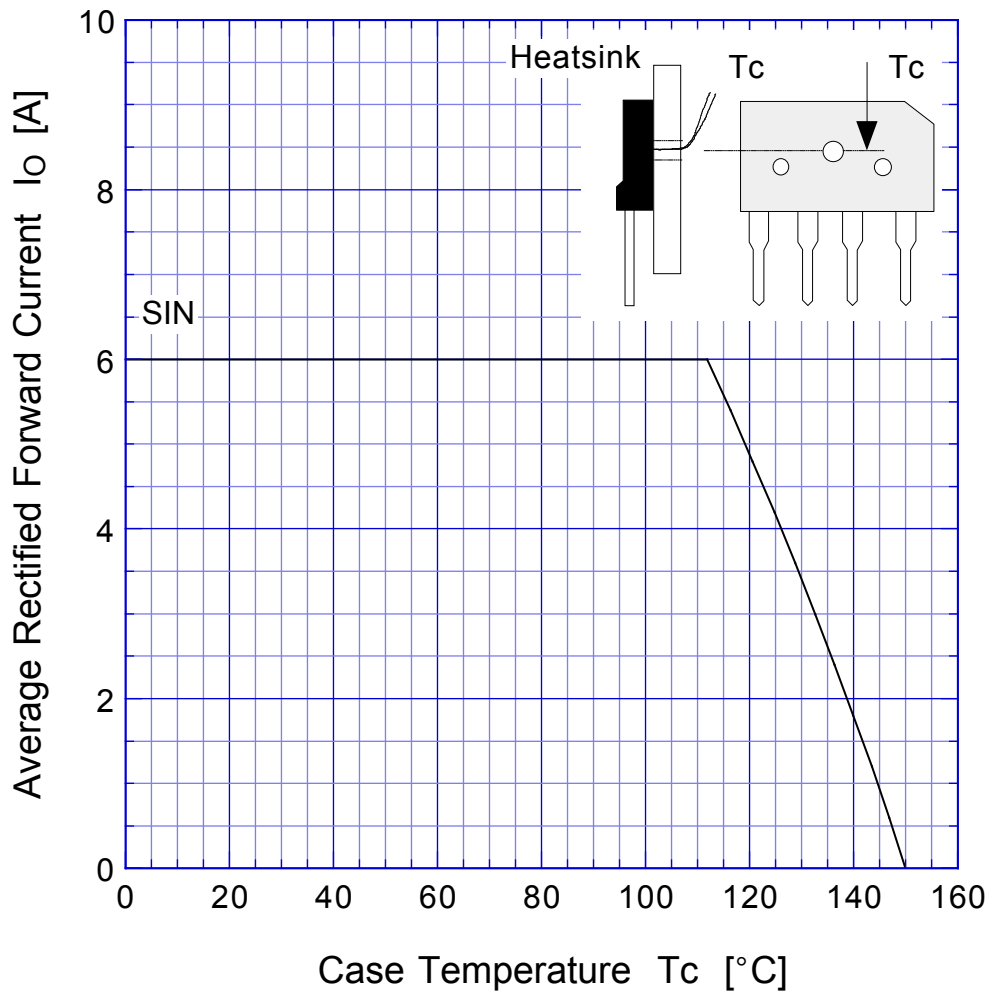
## D6SB60L Forward Power Dissipation



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

# D6SB60L

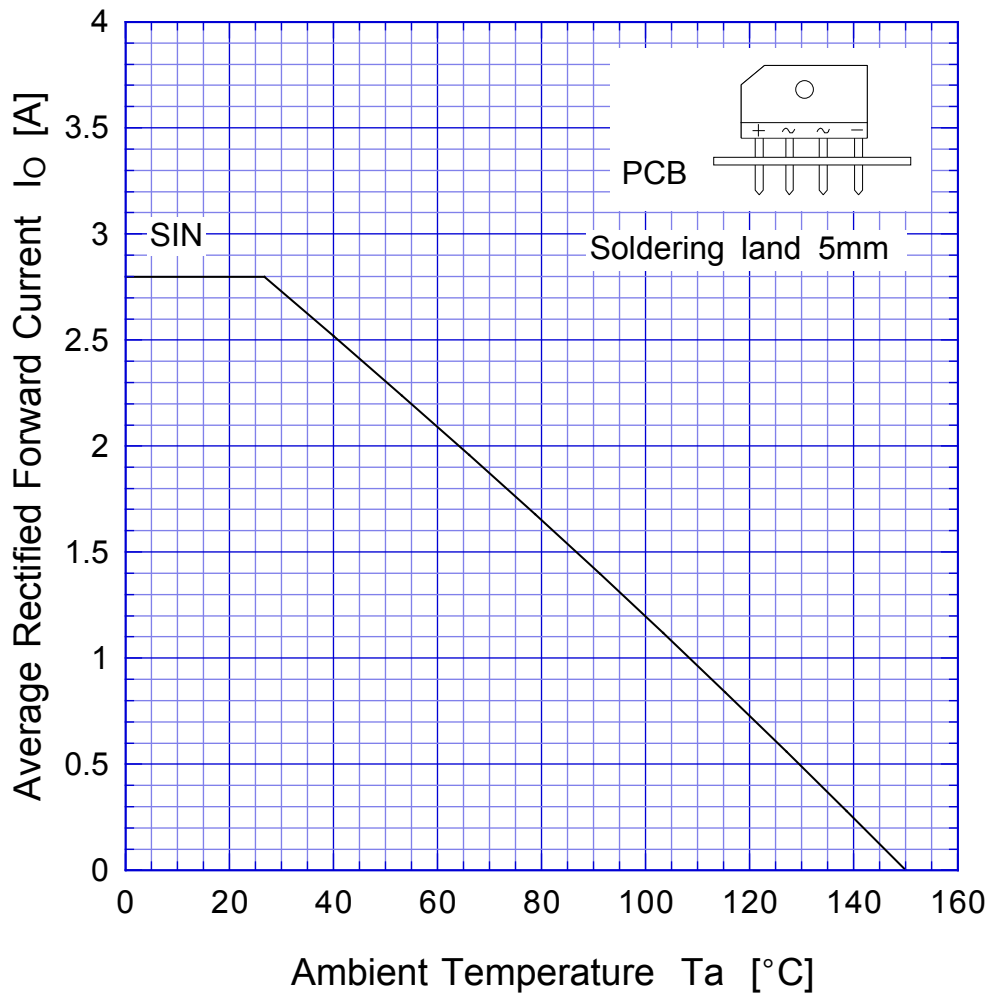
## Derating Curve



Sine wave  
R-load  
with heatsink

# D6SB60L

# Derating Curve



V<sub>R</sub> = 600V



# D6SB60L

## Peak Surge Forward Capability

