

# SHINDENGEN

## General Purpose Rectifiers

## Low Noise Bridges

# LN4SB60

## 600V 4A

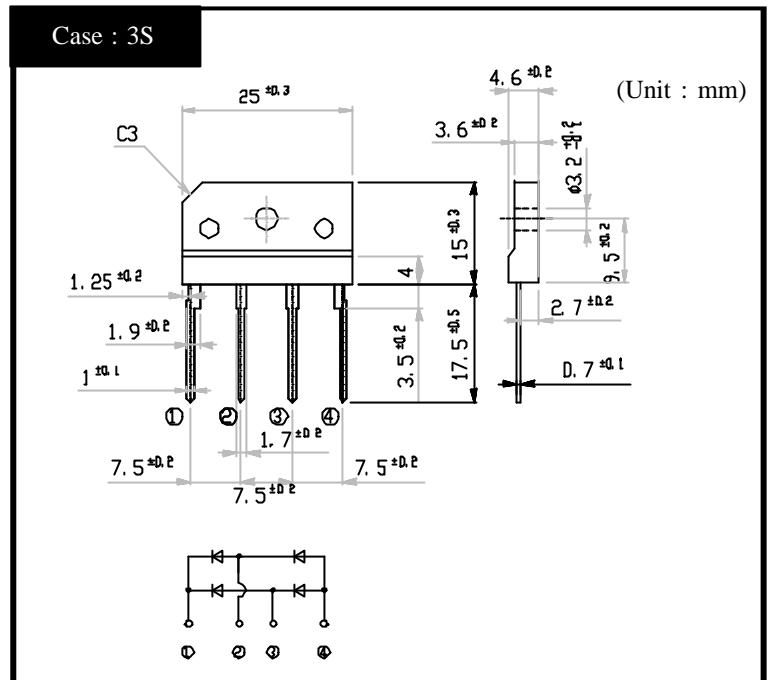
### FEATURES

- Low noise
- SIL Package
- High IFSM

### APPLICATION

- Switching power supply
- Home (Electrical) Appliances
- Office Equipment, Telecommunication,
- Factory Automation

### OUTLINE DIMENSIONS



### RATINGS

Absolute Maximum Ratings (If not specified  $T_c=25$  )

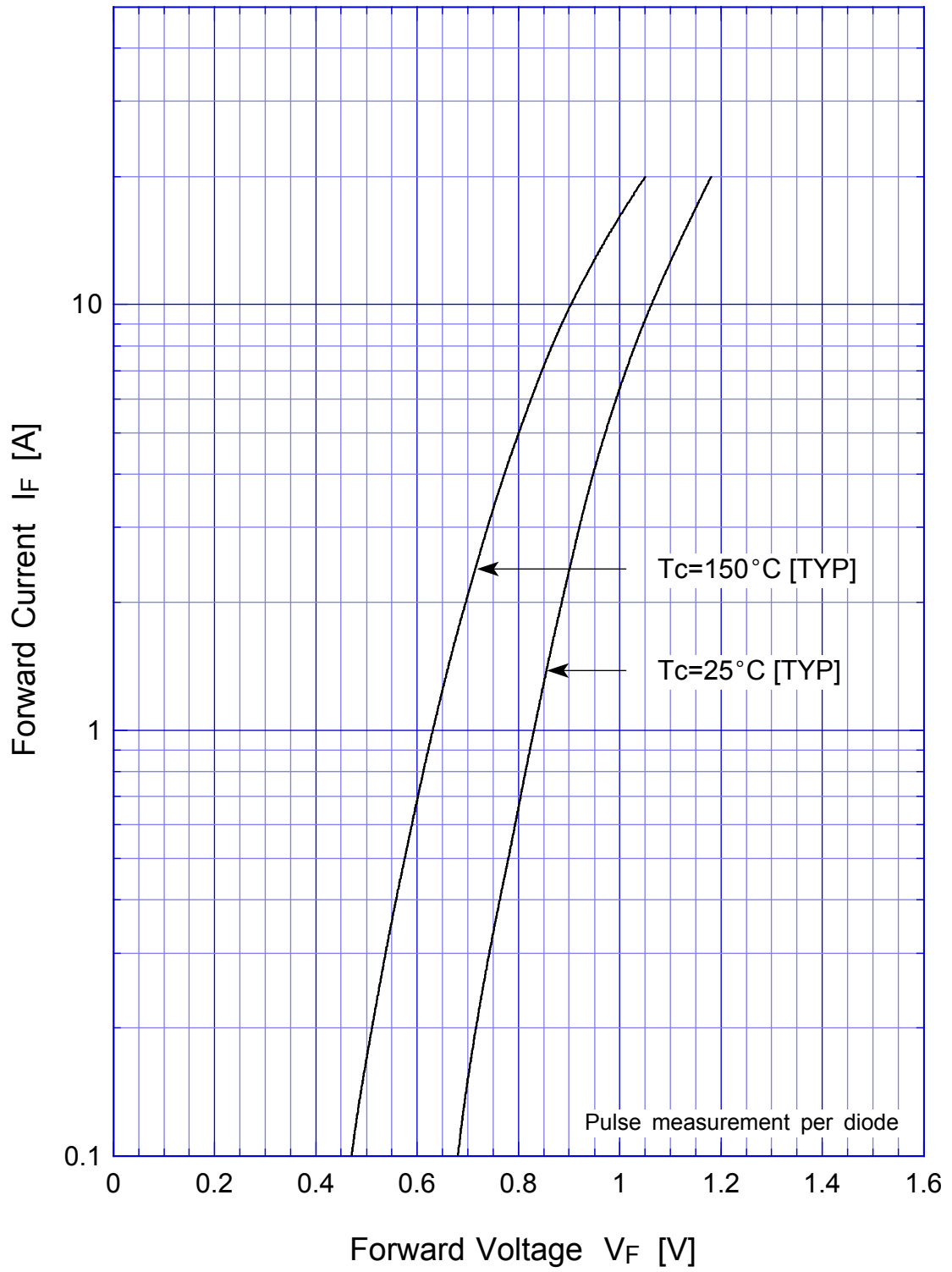
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-40 ~ 150	
Operating Junction Temperature	$T_j$		150	
Maximum Reverse Voltage	$V_{RM}$		600	V
Average Rectified Forward Current	$I_o$	50Hz sine wave, R-load With heatsink $T_c=111$	4.0	A
		50Hz sine wave, R-load Without heatsink $T_a=25$	2.5	
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25$	150	A
Repetitive Peak Surge Reverse Power	$P_{RRSM}$	Pulse width 10 $\mu$ s. Rating of per diode, $T_j=25$	2	kW
Current Squared Time	$I^2t$	1ms $t < 10$ ms $T_j=25$	50	A <sup>2</sup> s
Dielectric Strength	$V_{dis}$	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque $\geq 0.5N \cdot m$ )	0.8	N·m

Electrical Characteristics (If not specified  $T_c=25$  )

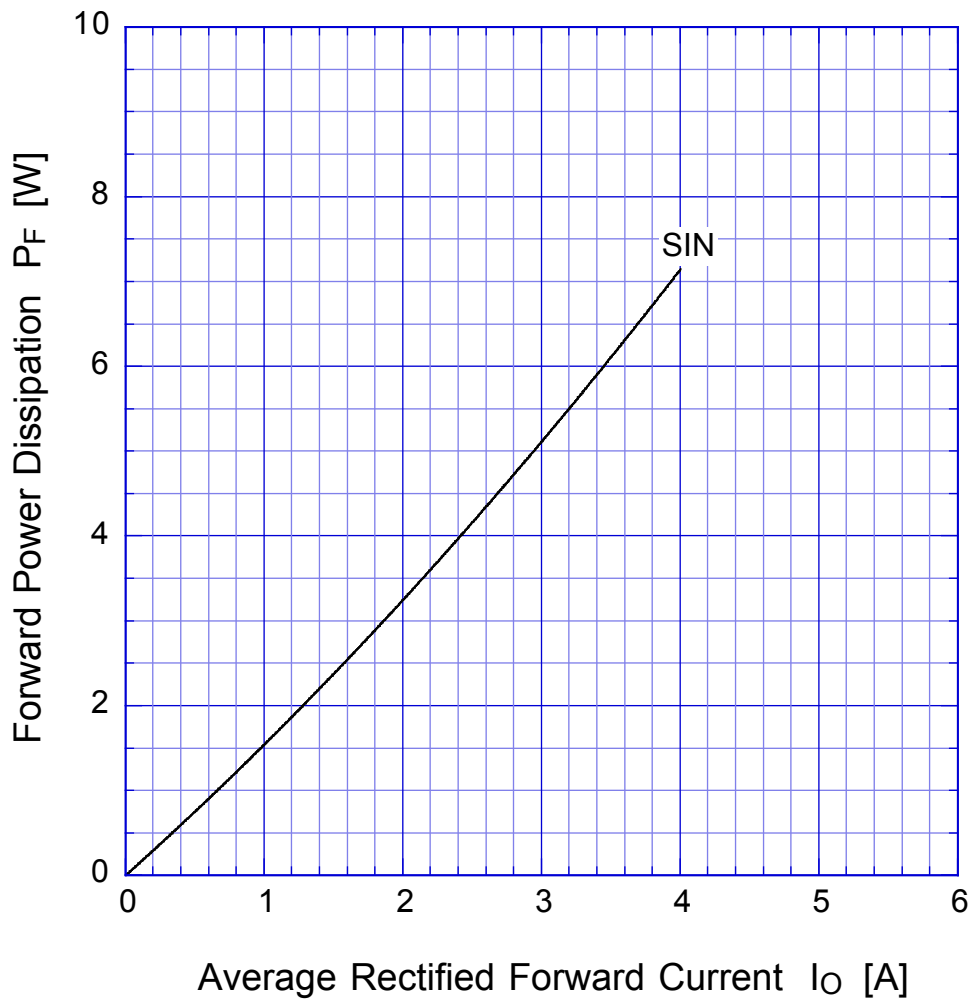
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=2A$ , Pulse measurement, Rating of per diode	Max. 0.95	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement, Rating of per diode	Max. 10	$\mu$ A
Reverse Recovery Time	$t_{rr}$	$I_F=0.1A$ , $I_R=0.1A$ , Rating of per diode	Max. 5	$\mu$ s
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	

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## Forward Voltage



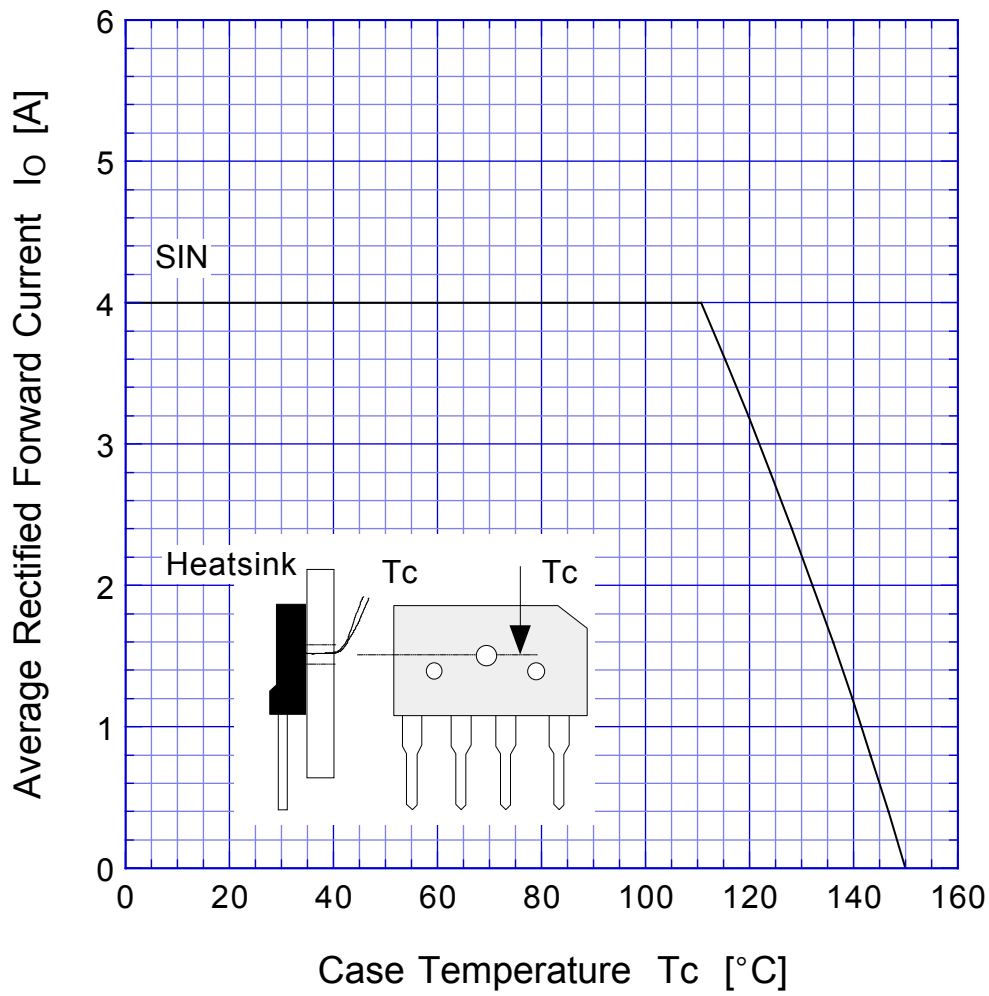
## LN4SB60 Forward Power Dissipation



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

# LN4SB60

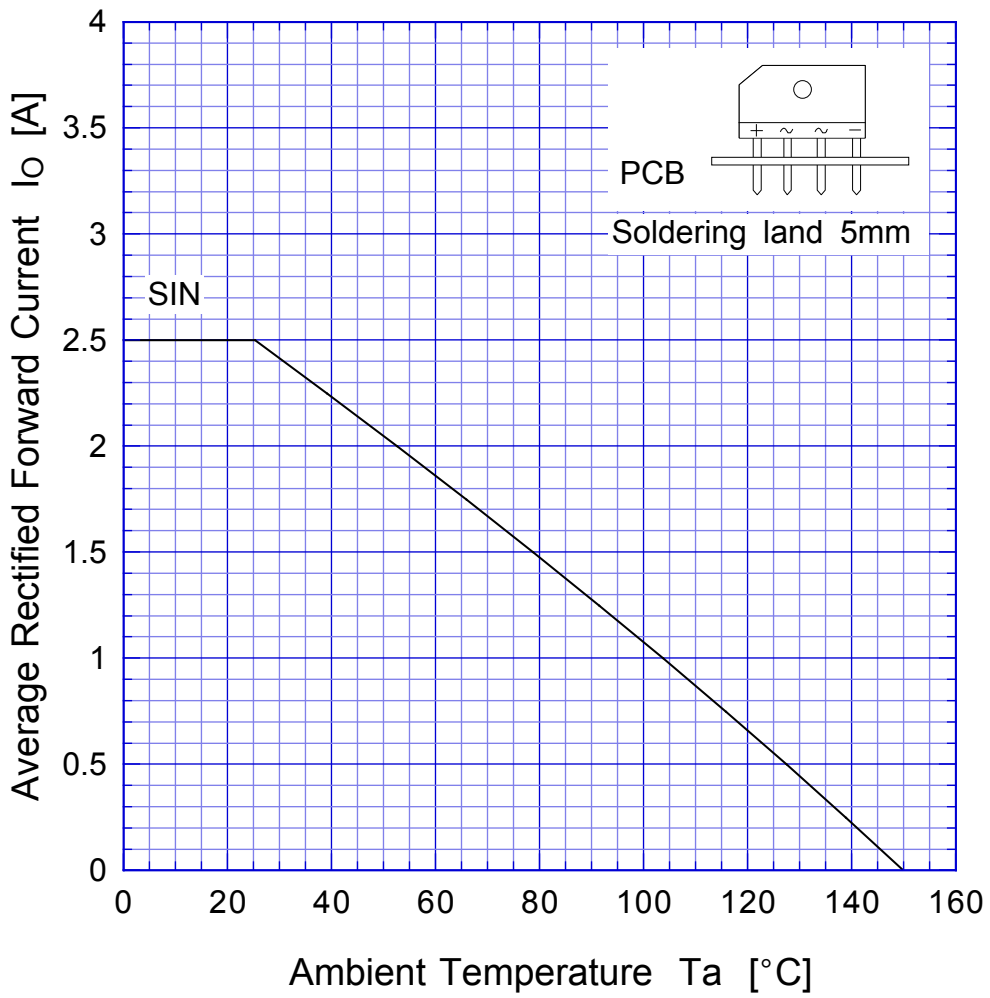
# Derating Curve



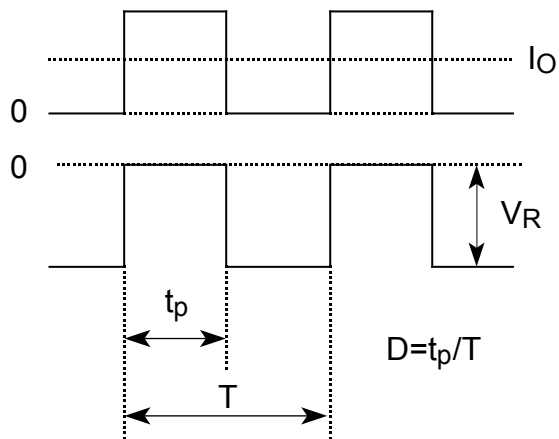
Sine wave  
R-load  
with heatsink

# LN4SB60

# Derating Curve



$V_R = 600V$   
Sine wave  
R-load  
Free in air



# LN4SB60

## Peak Surge Forward Capability

