

SHINDENGEN

General Purpose Rectifiers

Low Noise Bridges

LN6SB60

600V 6A

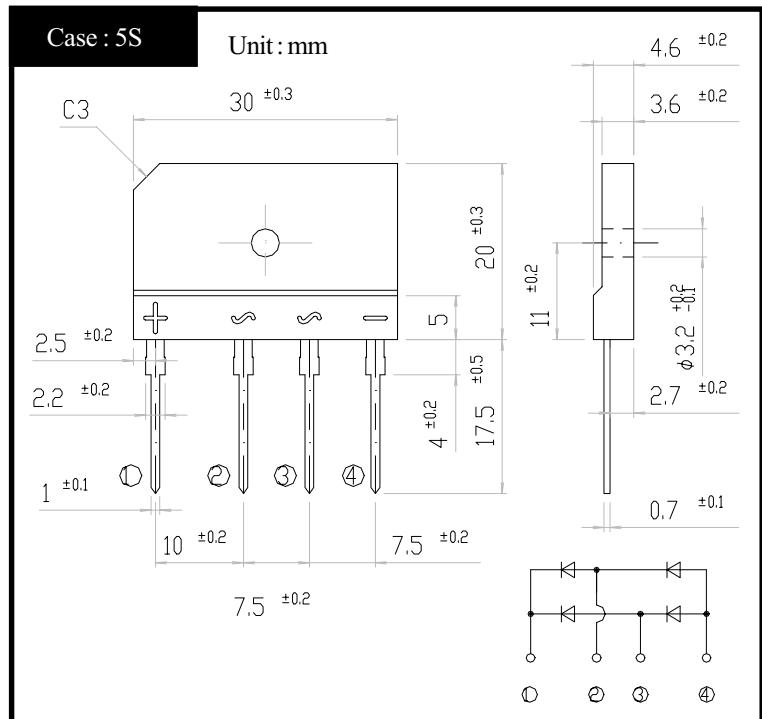
FEATURES

- Low noise
- SIL Package
- High IFSM
- UL recognized
(UL File No. E142422)

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

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

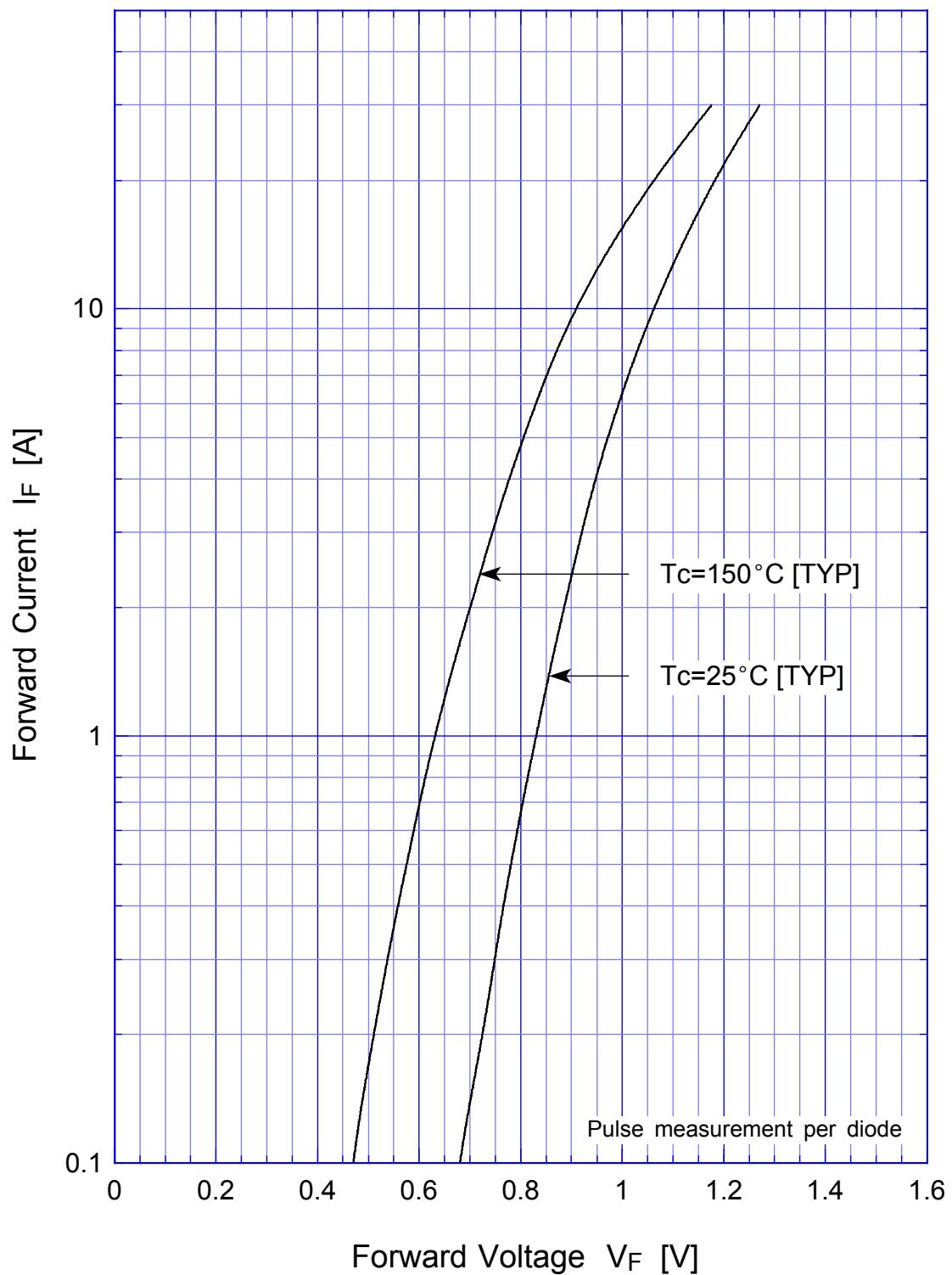
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	T_{stg}		-40 ~ 150	°C
Operating Junction Temperature	T_j		150	°C
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_o	50Hz sine wave, R-load With heatsink $T_c=111^\circ\text{C}$	6.0	A
		50Hz sine wave, R-load Without heatsink $T_a=25^\circ\text{C}$	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	$1\text{ms} \leq t < 10\text{ms}$ $T_j=25^\circ\text{C}$	50	A^2s
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2	kV
Mounting Torque	TOR	(Recommended torque: 0.5N·m)	0.8	N·m

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

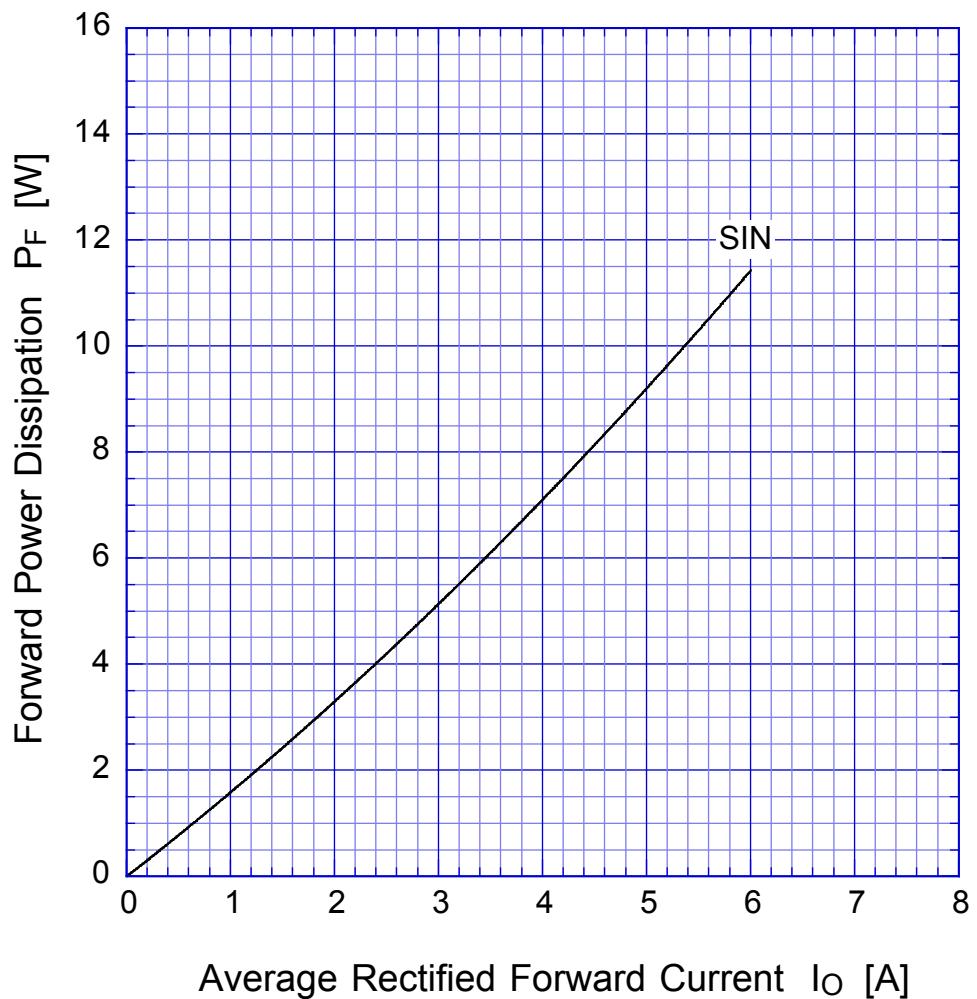
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V_F	$I_F=3\text{A}$, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I_R	$V_R=V_{\text{RM}}$, Pulse measurement, Rating of per diode	Max.10	μA
Reverse Recovery Time	t_{rr}	$I_F=0.1\text{A}$, $I_R=0.1\text{A}$, Rating of per diode	Max.5	μs
Thermal Resistance	θ_{jc}	junction to case With heatsink	Max.3.4	°C/W
	θ_{jl}	junction to lead Without heatsink	Max.5	
	θ_{ja}	junction to ambient Without heatsink	Max.26	
	θ_{cf}	case to heatsink, Mounting torque=0.5N·m	Max.2	

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Forward Voltage



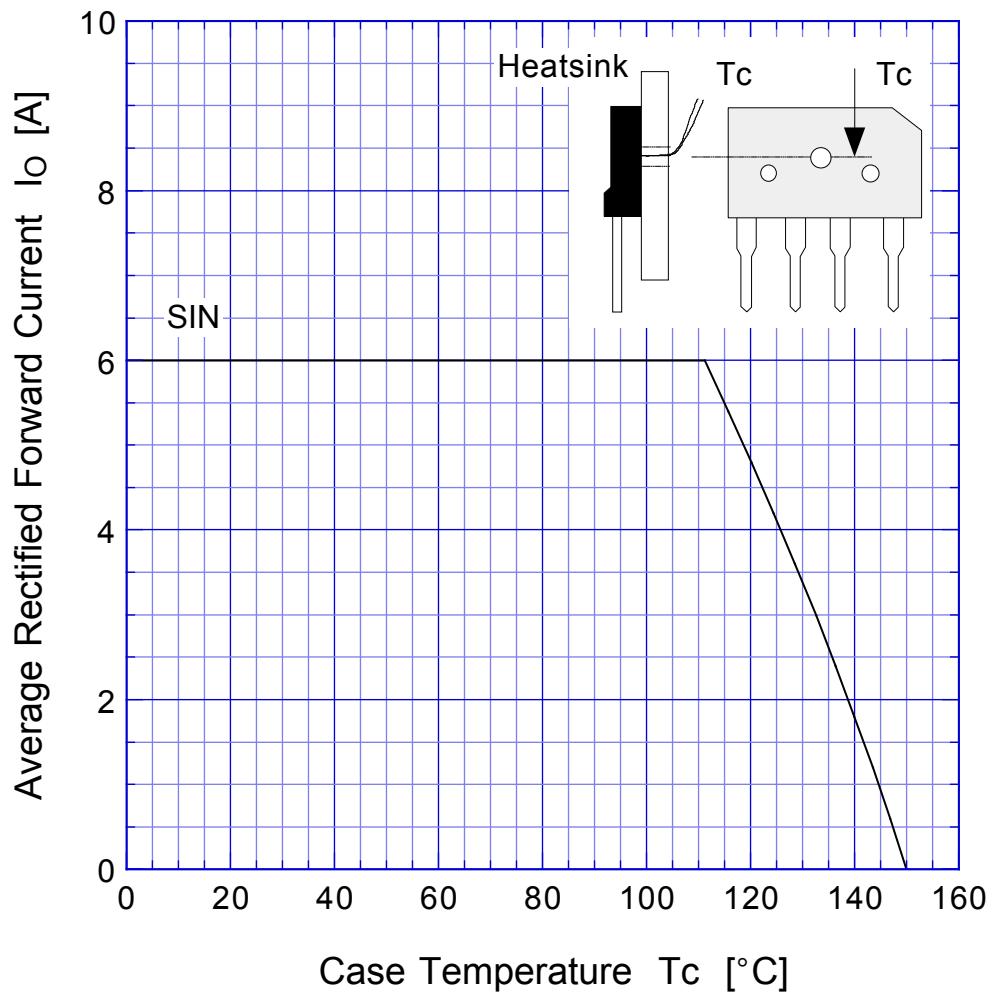
LN6SB60 Forward Power Dissipation



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

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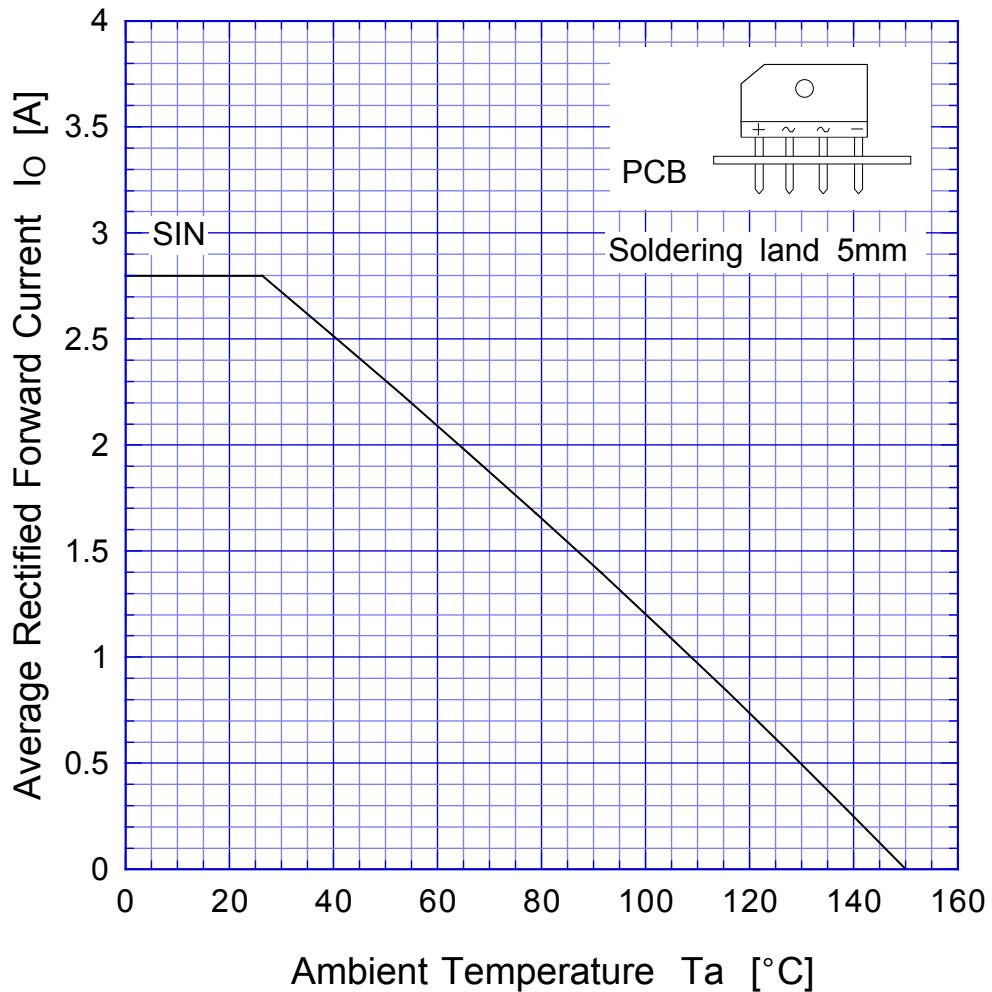
Derating Curve



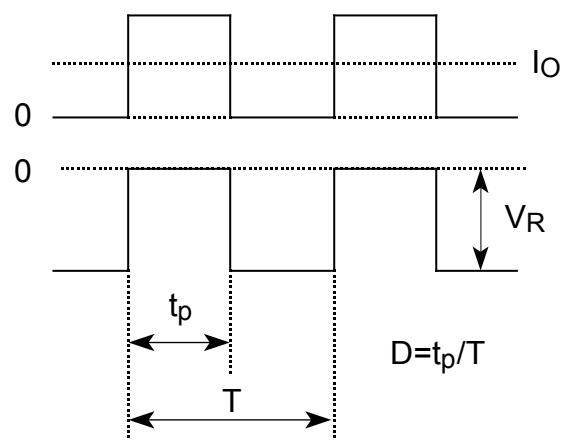
Sine wave
R-load
with heatsink

LN6SB60

Derating Curve



$V_R = 600V$



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Peak Surge Forward Capability

