

SHINDENGEN

General Purpose Rectifiers

Low Noise Bridges

LN6SB60

600V 6A

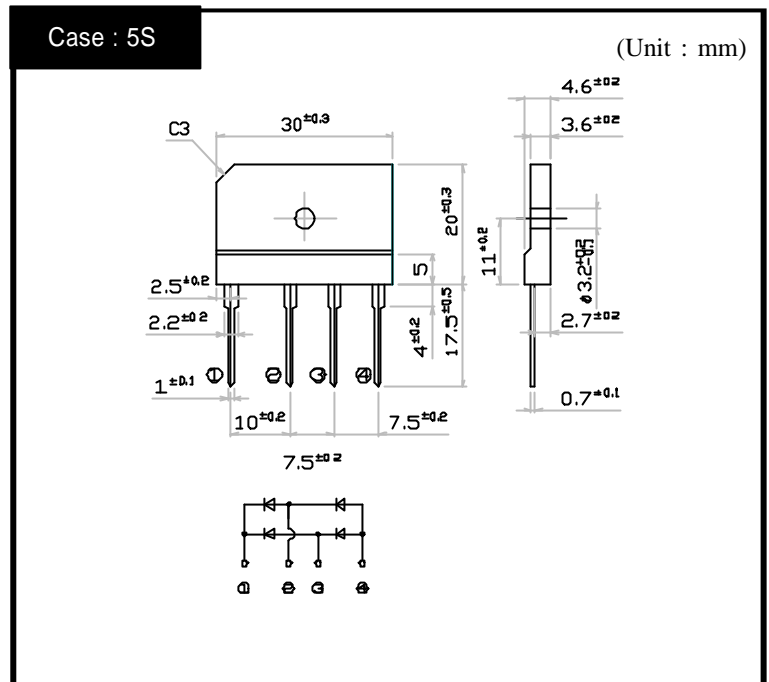
FEATURES

- 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 Tc=25)

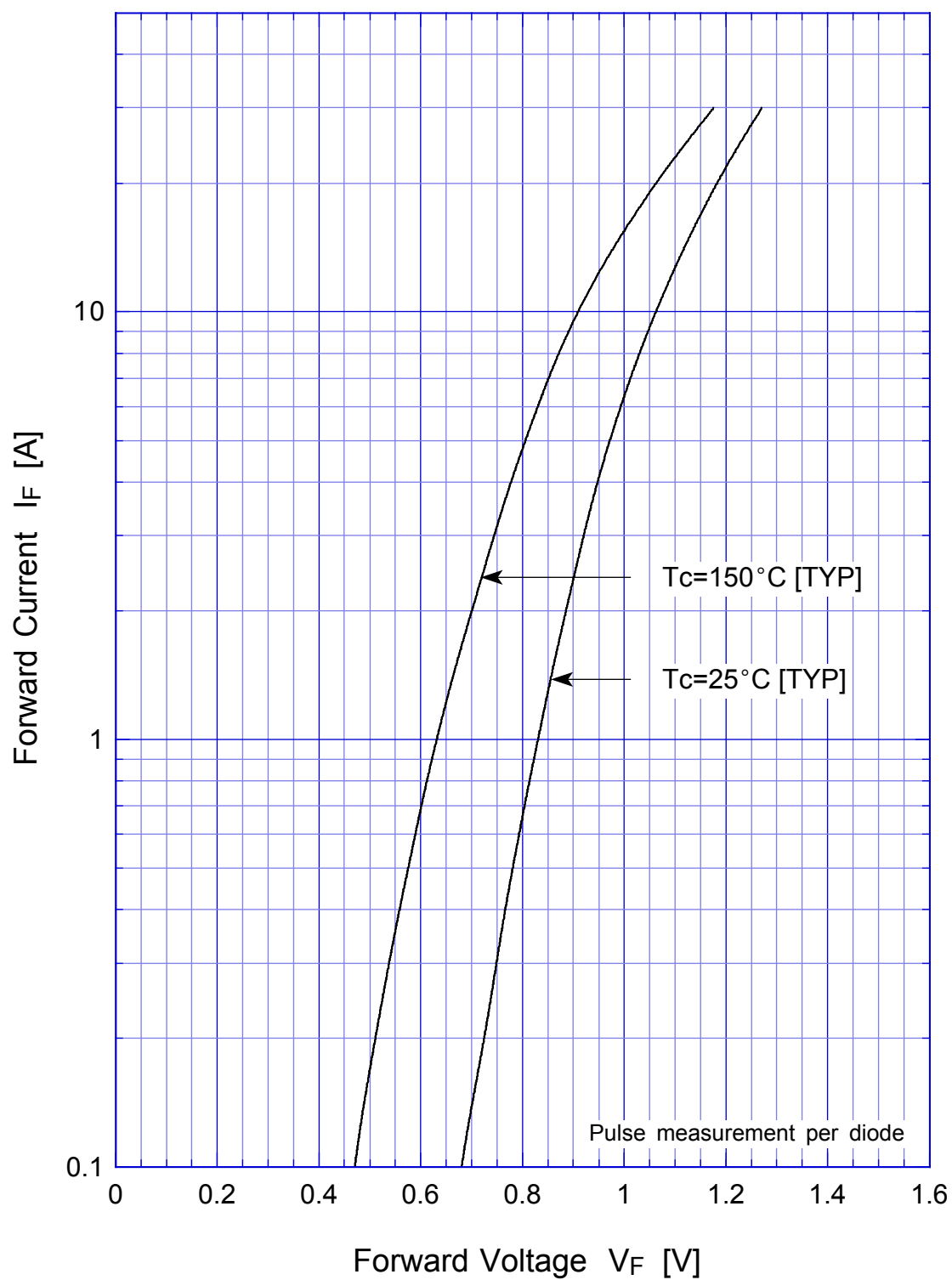
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40 ~ 150	
Operating Junction Temperature	Tj		150	
Maximum Reverse Voltage	V _{RM}		600	V
Average Rectified Forward Current	I _O	50Hz sine wave, R-load With heatsink Tc=111	6.0	A
		50Hz sine wave, R-load Without heatsink Ta=25	2.8	
Peak Surge Forward Current	I _{FSM}	50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25	170	A
Repetitive Peak Surge Reverse Power	P _{RRSM}	Pulse width 10 μs, Rating of per diode, Tj=25	2	kW
Current Squared Time	I ² t	1ms t < 10ms Tj=25	50	A ² s
Dielectric Strength	Vdis	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 Tc=25)

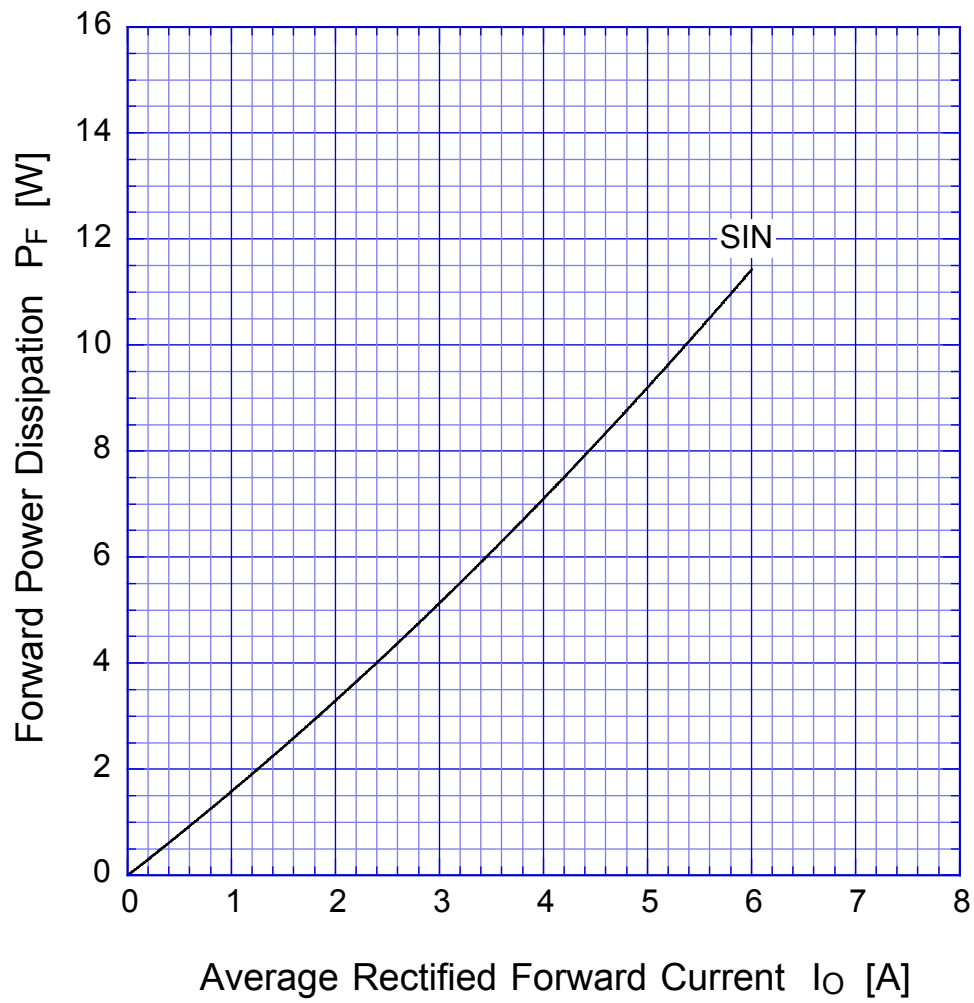
Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	V _F	I _F =3A, Pulse measurement, Rating of per diode	Max.1.05	V
Reverse Current	I _R	V _R =V _{RM} , Pulse measurement, Rating of per diode	Max.10	μA
Reverse Recovery Time	trr	I _F =0.1A, I _R =0.1A, Rating of per diode	Max.5	μs
Thermal Resistance	jc	junction to case With heatsink	Max.3.4	/W
	jl	junction to lead Without heatsink	Max.5	
	ja	junction to ambient Without heatsink	Max.26	
	cf	case to heatsink, Mounting torque=0.5N·m	Max.2	

LN6SB60

Forward Voltage



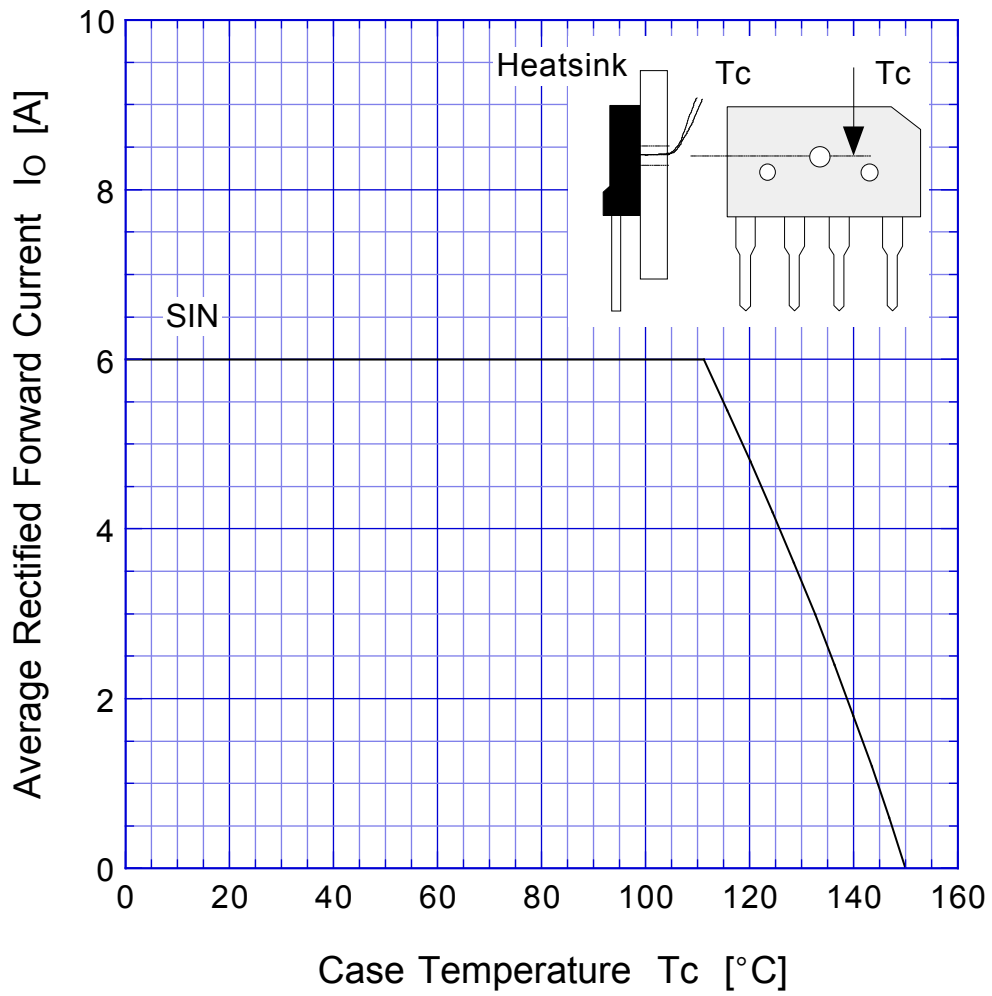
LN6SB60 Forward Power Dissipation



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

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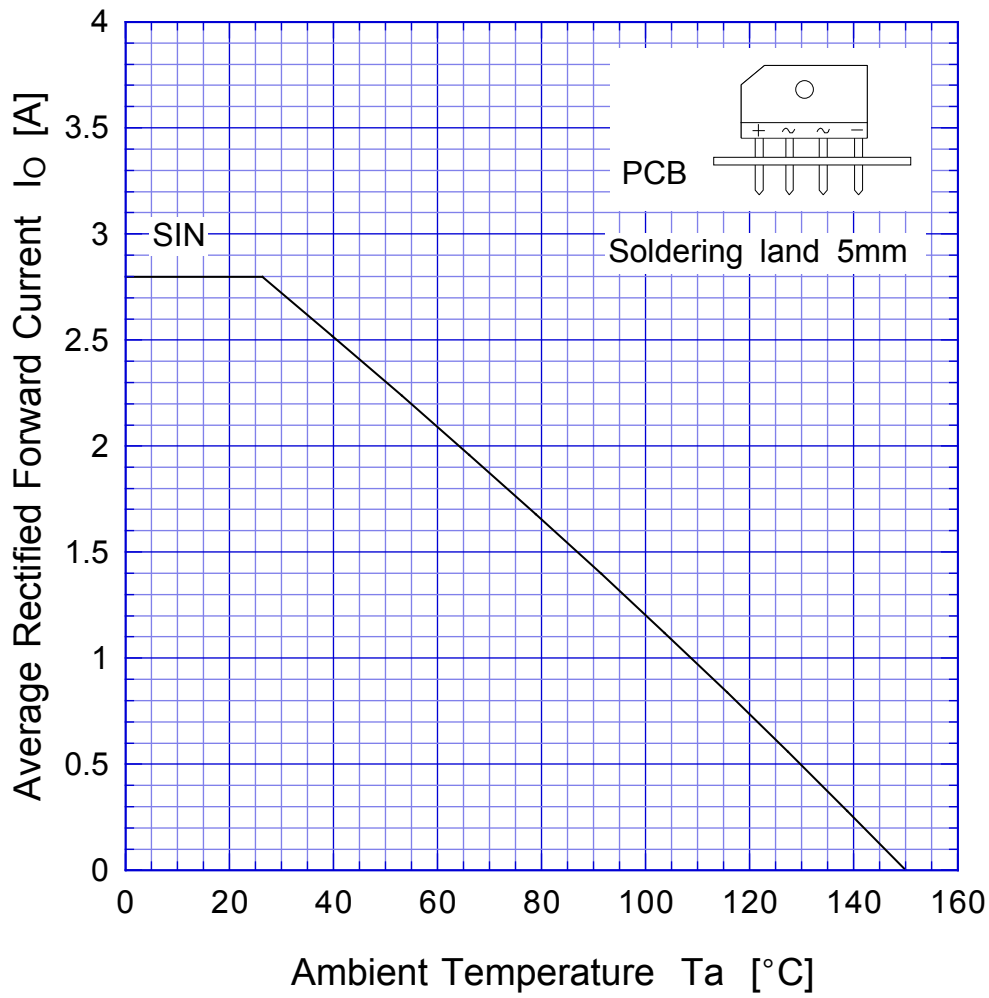
Derating Curve



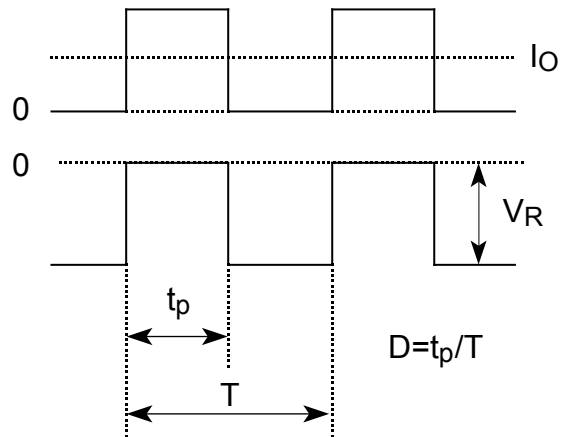
Sine wave
R-load
with heatsink

LN6SB60

Derating Curve



$V_R = 600V$



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Peak Surge Forward Capability

