SHINDENGEN

General Purpose Rectifiers

Low Noise Bridges

LN6SB60

600V 6A

FEATURES

- Low noise
- SIL Package
- High IFSM

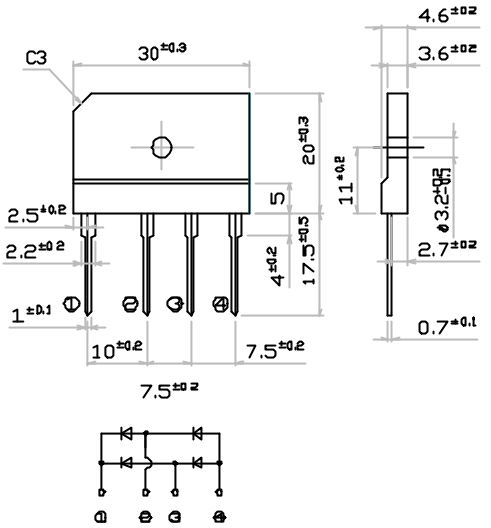
APPLICATION

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

OUTLINE DIMENSIONS

Case : 5S

(Unit : mm)



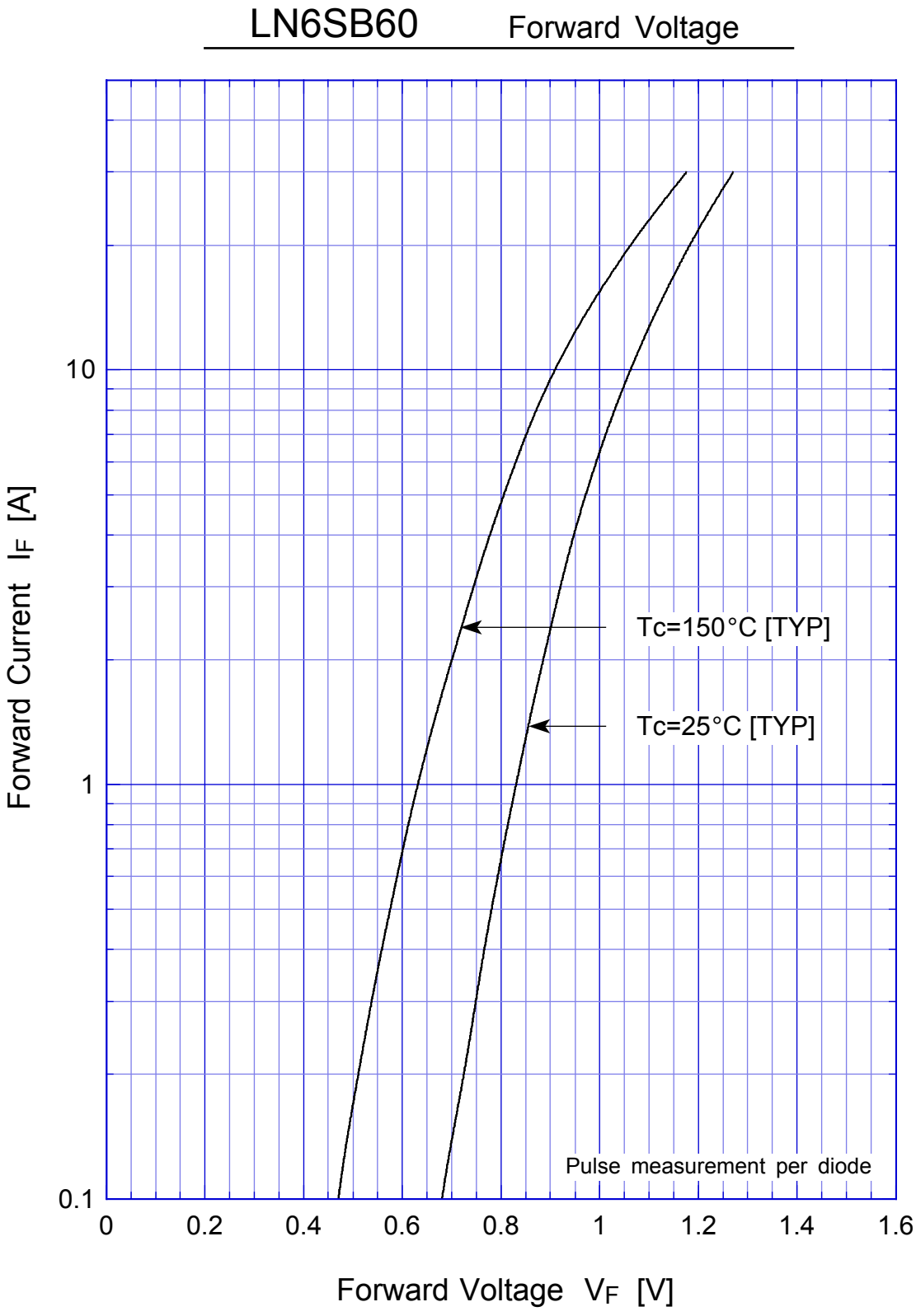
RATINGS

●Absolute Maximum Ratings (If not specified Tc=25°C)

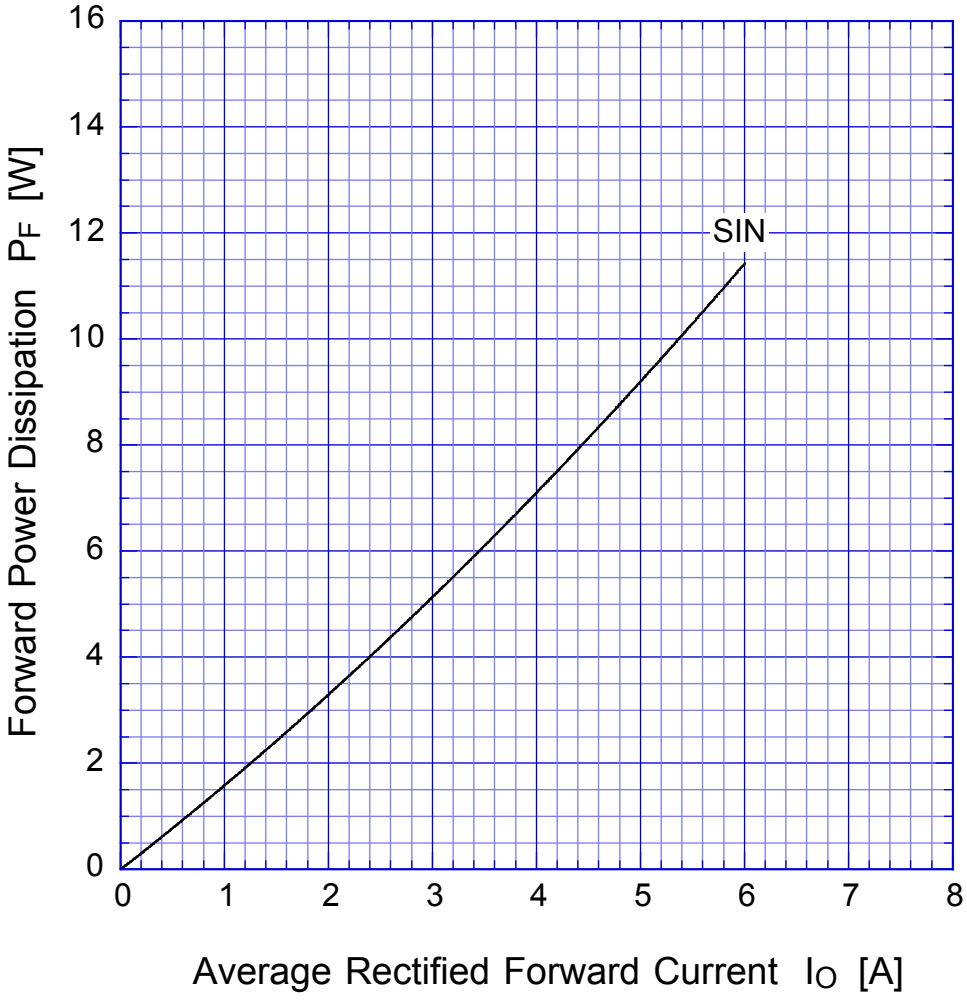
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	Tstg		-40～150	°C
Operating Junction Temperature	Tj		150	°C
Maximum Reverse Voltage	V_{RM}		600	V
Average Rectified Forward Current	I_O	50Hz sine wave, R-load With heatsink Tc=111°C	6.0	A
		50Hz sine wave, R-load Without heatsink Ta=25°C	2.8	
Peak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

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	θjc	junction to case With heatsink	Max.3.4	°C/W
	θjl	junction to lead Without heatsink	Max.5	
	θja	junction to ambient Without heatsink	Max.26	
	θcf	case to heatsink, Mounting torque=0.5N･m	Max.2	

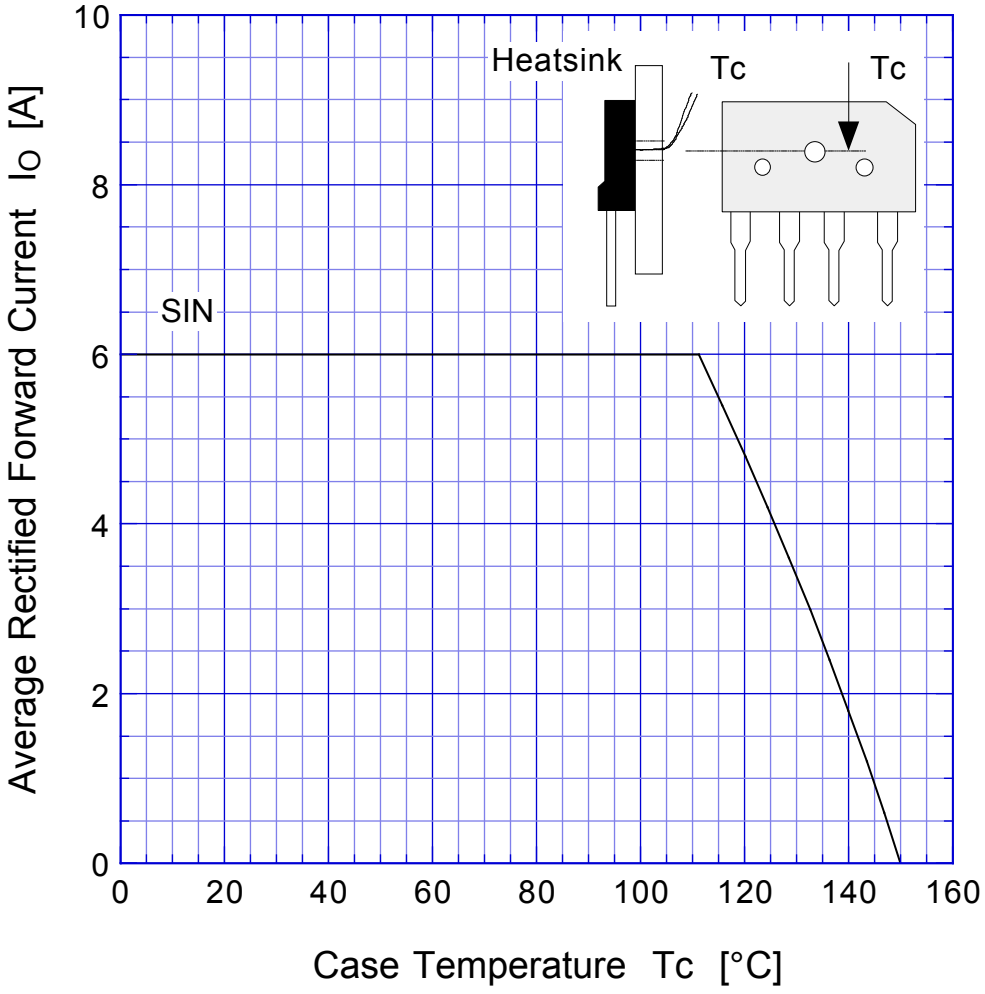

LN6SB60
Forward Voltage
Forward Current IF [A]
10
1
0.1
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
Forward Voltage VF [V]
Tc=150°C [TYP]
Tc=25°C [TYP]
Pulse measurement per diode

LN6SB60 Forward Power Dissipation



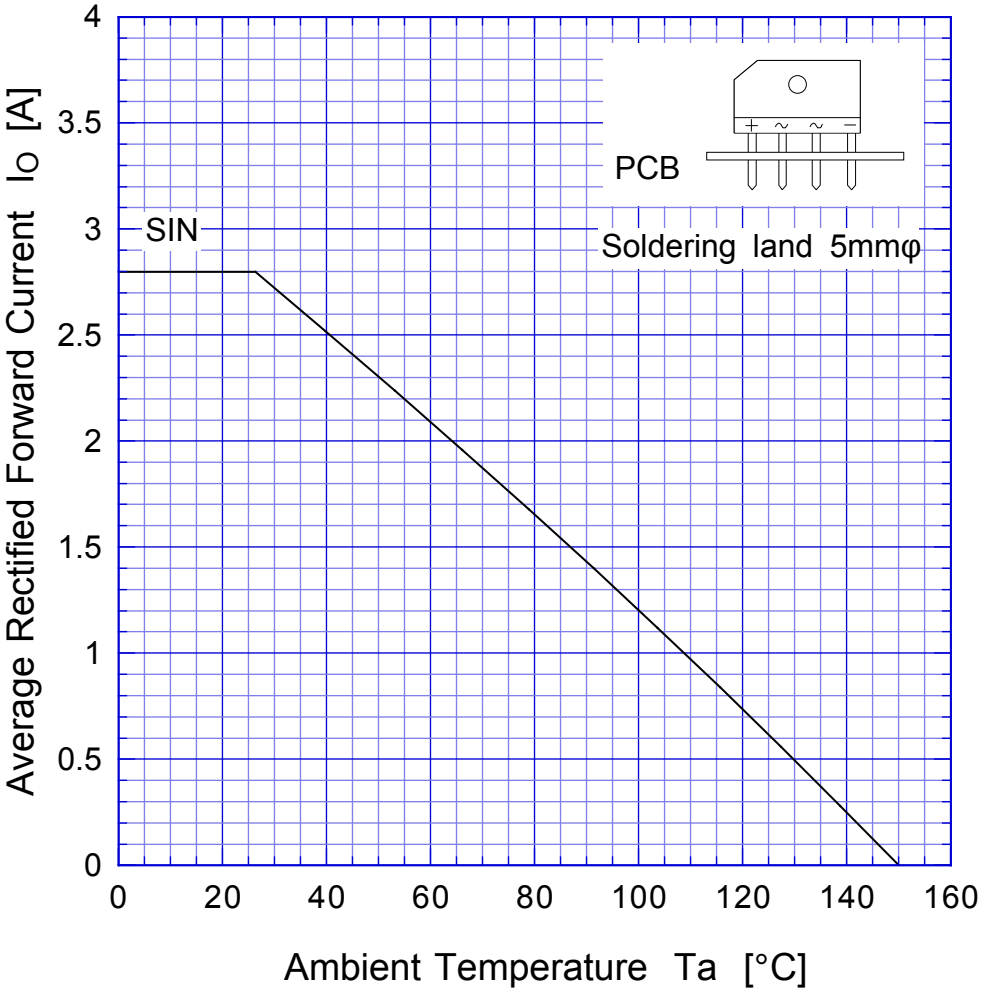
Tj = 150°C
Sine wave

LN6SB60 Derating Curve

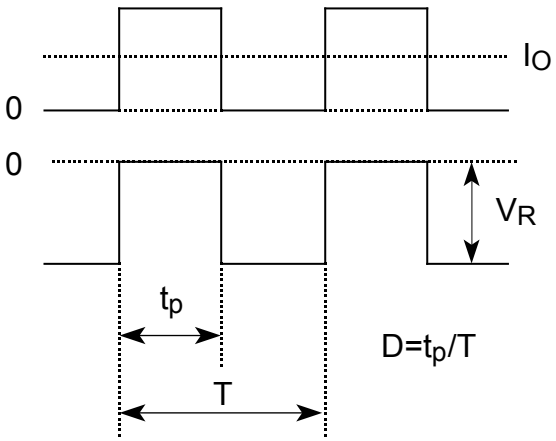


Sine wave
R-load
with heatsink

LN6SB60 Derating Curve



V_R = 600V



LN6SB60 Peak Surge Forward Capability