

SHINDENGEN

General Purpose Rectifiers

Low Noise Bridges

LN4SB60

600V 4A

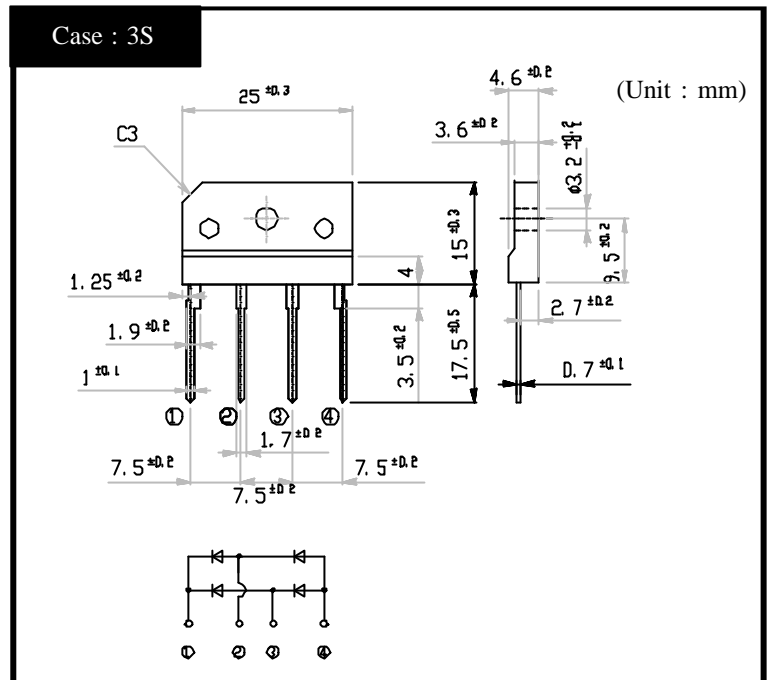
FEATURES

- 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 Tc=25)

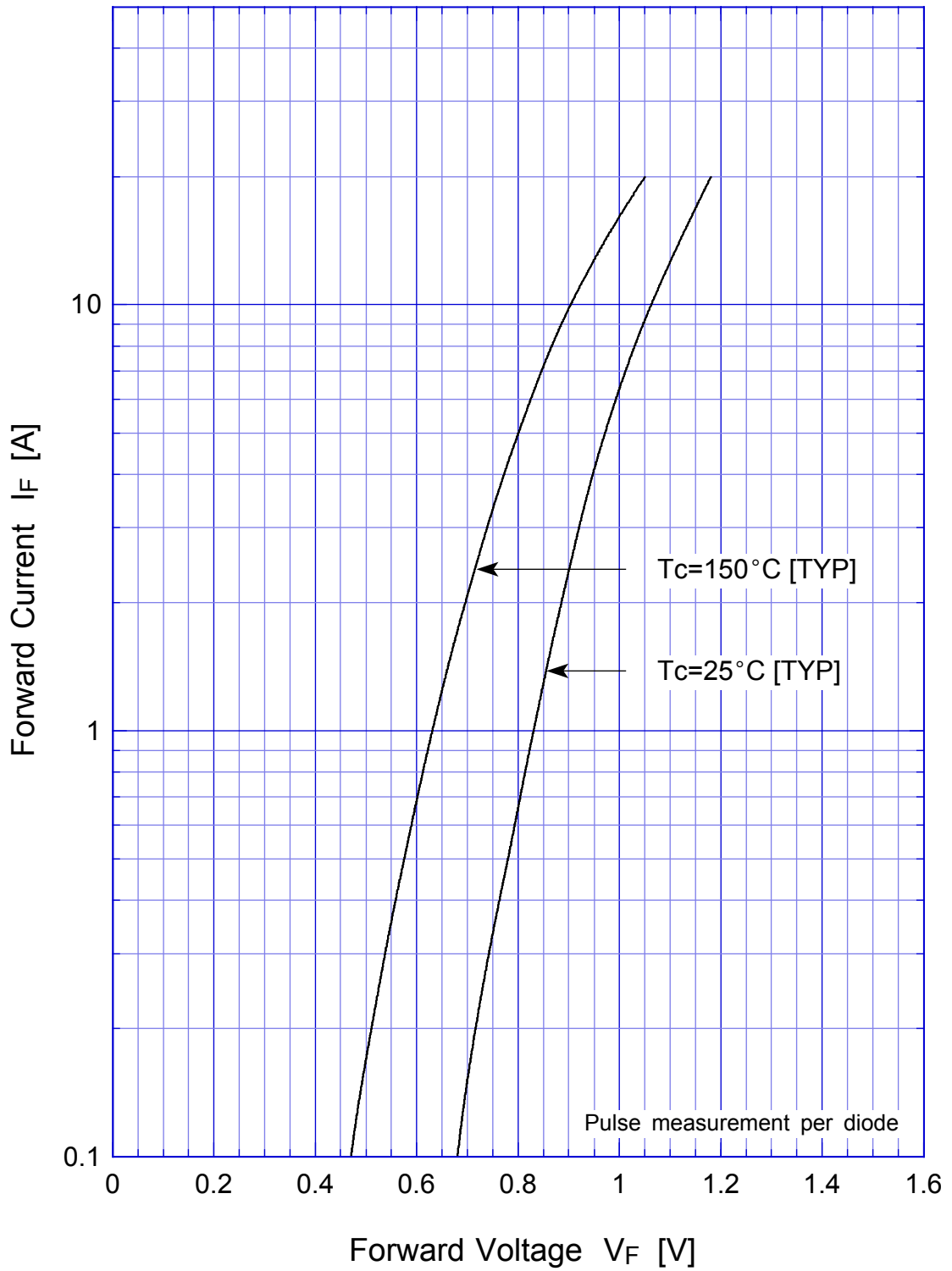
| Item | Symbol | Conditions | Ratings | Unit |
|-------------------------------------|-------------------|---|-----------|------------------|
| Storage Temperature | Tstg | | -40 ~ 150 | |
| Operating Junction Temperature | Tj | | 150 | |
| Maximum Reverse Voltage | V _{RM} | | 600 | V |
| Average Rectified Forward Current | I _o | 50Hz sine wave, R-load With heatsink Tc=111 | 4.0 | A |
| | | 50Hz sine wave, R-load Without heatsink Ta=25 | 2.5 | |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25 | 150 | 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 | 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 Tc=25)

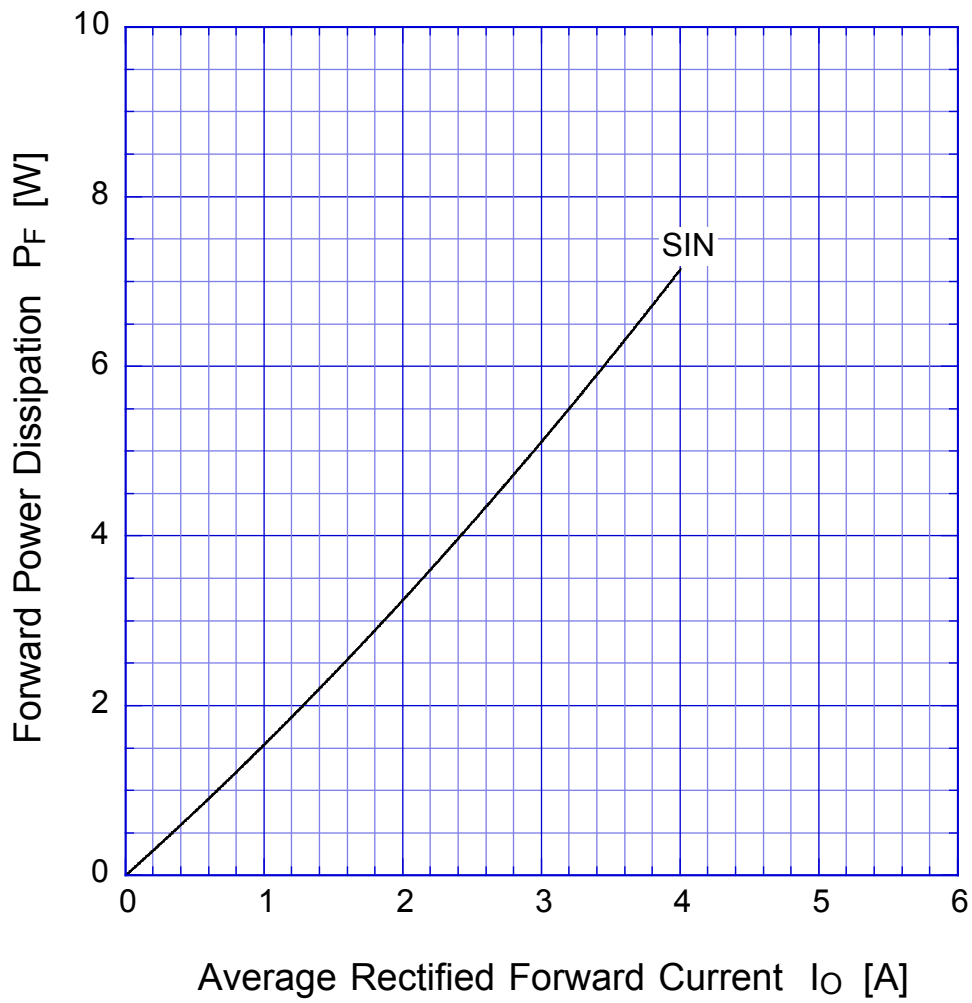
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------|-----------------|--|-----------|------|
| Forward Voltage | V _F | I _F =2A, Pulse measurement, Rating of per diode | Max. 0.95 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement, Rating of per diode | Max. 10 | μA |
| Reverse Recovery Time | t _{rr} | I _F =0.1A, I _R =0.1A, Rating of per diode | Max. 5 | μs |
| Thermal Resistance | j-c | junction to case With heatsink | Max. 5.5 | /W |
| | j-l | junction to lead Without heatsink | Max. 6 | |
| | j-a | junction to ambient Without heatsink | Max. 30 | |

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Forward Voltage



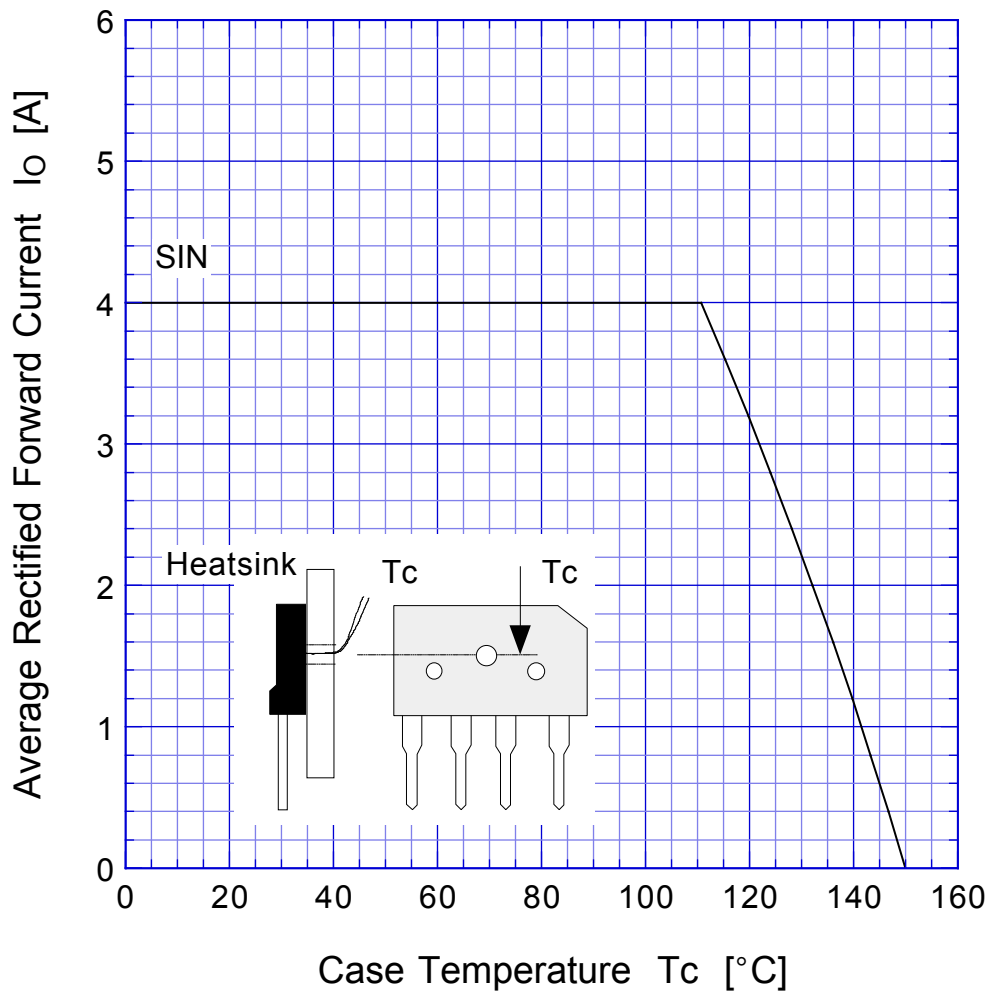
LN4SB60 Forward Power Dissipation



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

LN4SB60

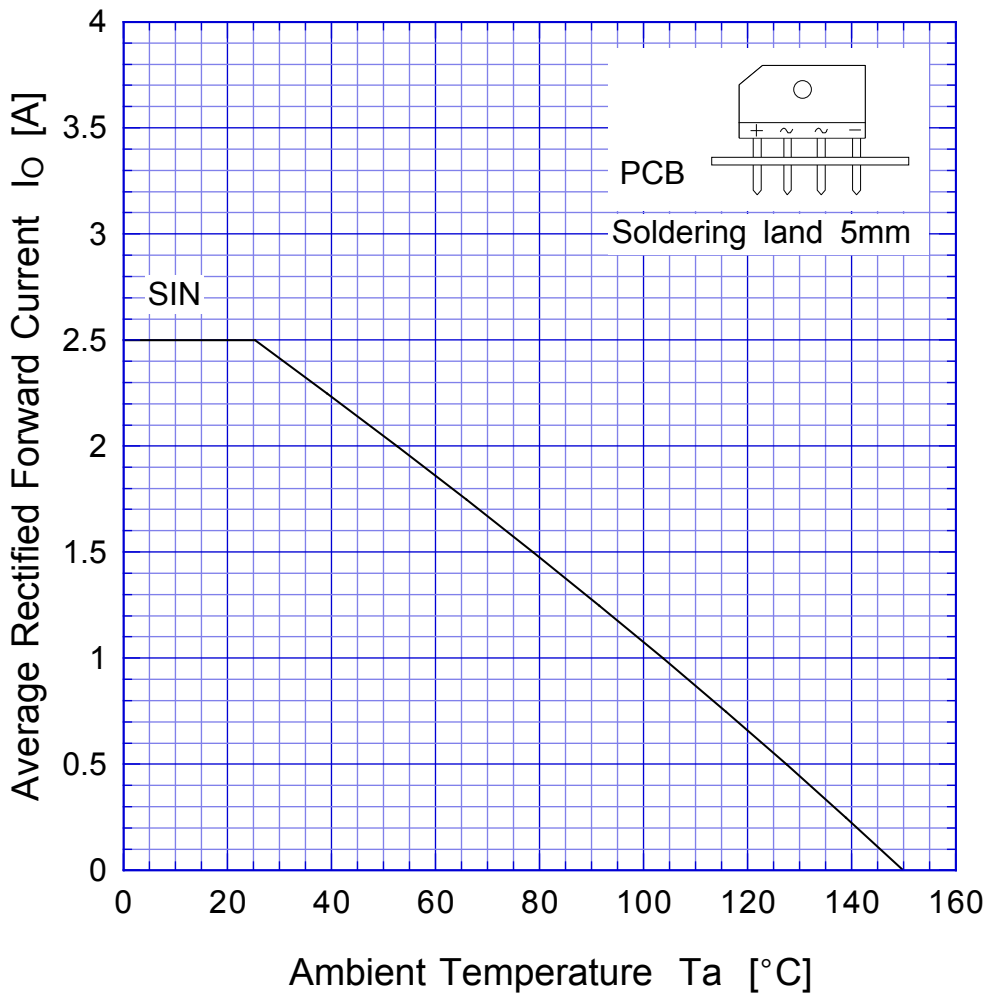
Derating Curve



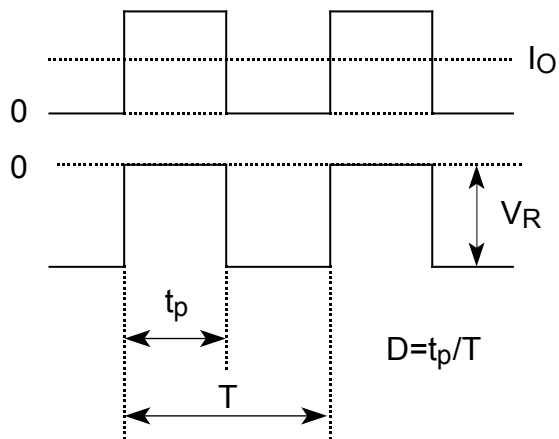
Sine wave
R-load
with heatsink

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Derating Curve



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



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Peak Surge Forward Capability

