

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D6SB80

800V 6A

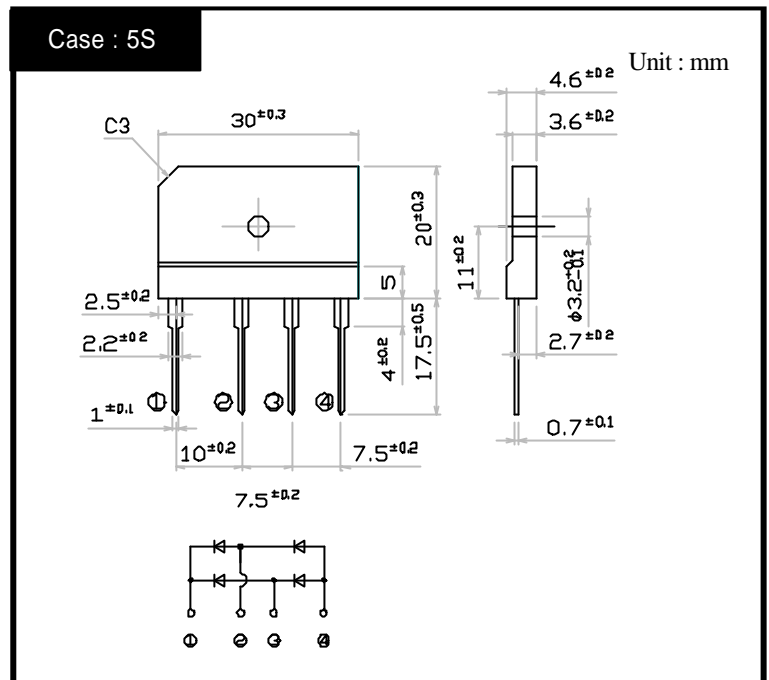
FEATURES

- Thin Single In-Line Package
- High IFSM
- Applicable to Automatic Insertion

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

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

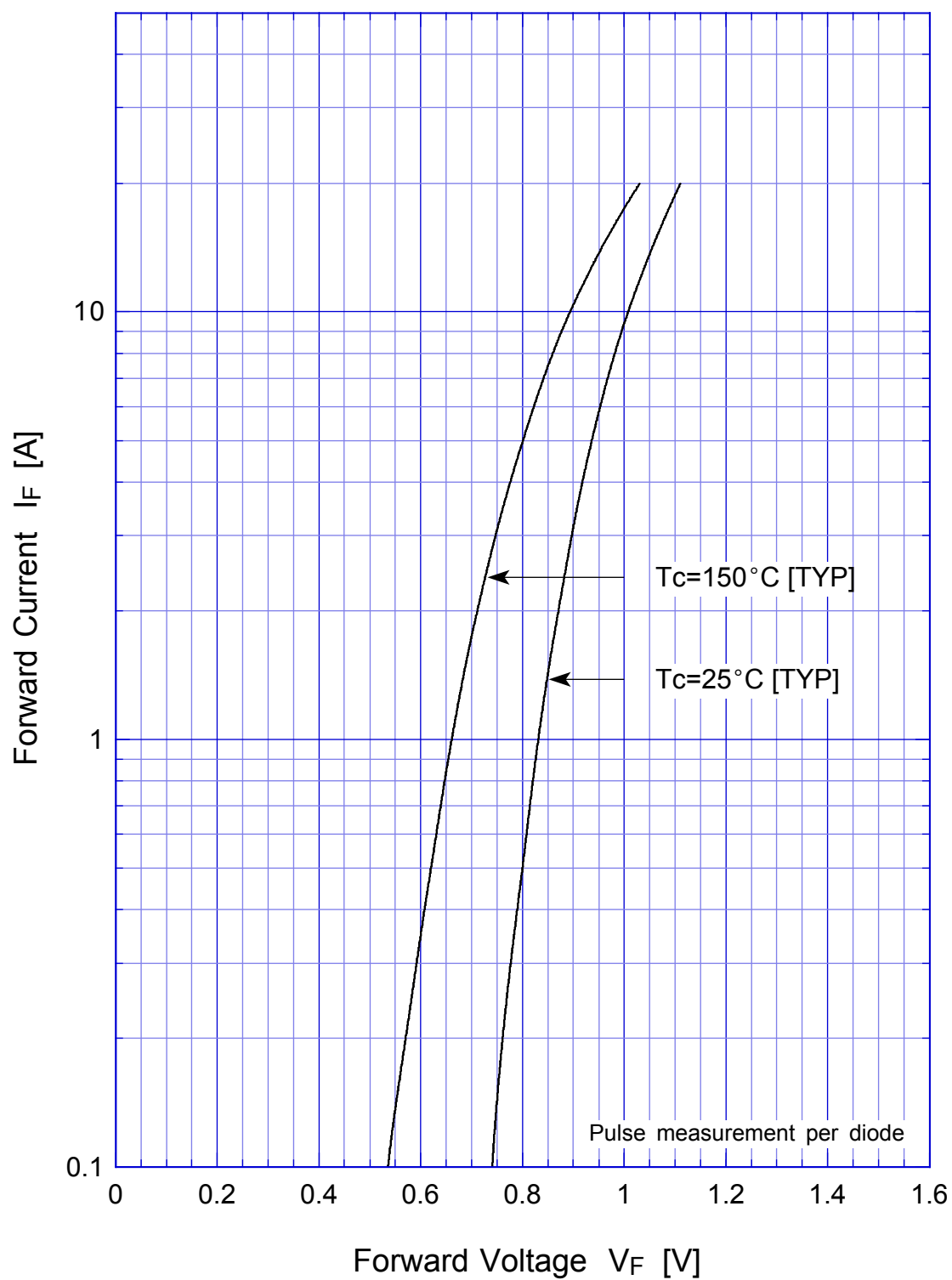
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|-----------|--|-----------|-------------|
| Storage Temperature | T_{stg} | | -40 ~ 150 | |
| Operating Junction Temperature | T_j | | 150 | |
| Maximum Reverse Voltage | V_{RM} | | 800 | V |
| Average Rectified Forward Current | I_O | 50Hz sine wave, R-load With heatsink $T_c=110$ | 6 | A |
| | | 50Hz sine wave, R-load Without heatsink $T_a=25$ | 2.8 | |
| Peak Surge Forward Current | I_{FSM} | 50Hz sine wave, Non-repetitive 1cycle peak value, $T_j=25$ | 170 | A |
| Current Squared Time | I^2t | 1ms $t < 10ms$ $T_j=25$ | 140 | A^2s |
| Dielectric Strength | V_{dis} | Terminals to case, AC 1 minute | 2.5 | kV |
| Mounting Torque | TOR | (Recommended torque $0.5N \cdot m$) | 0.8 | $N \cdot m$ |

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

| Item | Symbol | Conditions | Ratings | Unit |
|--------------------|---------------|---|-----------|---------|
| Forward Voltage | V_F | $I_F=3.0A$, 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 |
| Thermal Resistance | θ_{jc} | junction to case With heatsink | Max. 3.4 | /W |
| | θ_{jl} | junction to lead Without heatsink | Max. 5 | |
| | θ_{ja} | junction to ambient Without heatsink | Max. 26 | |

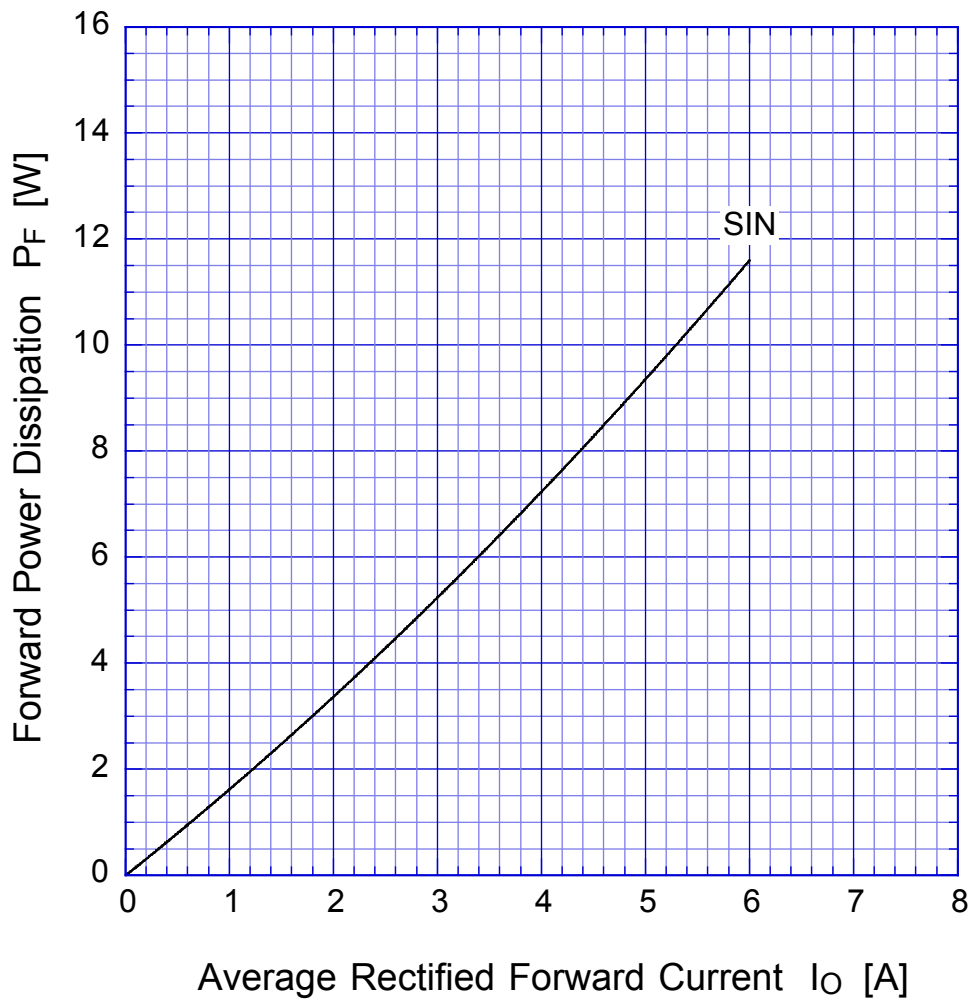
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Forward Voltage



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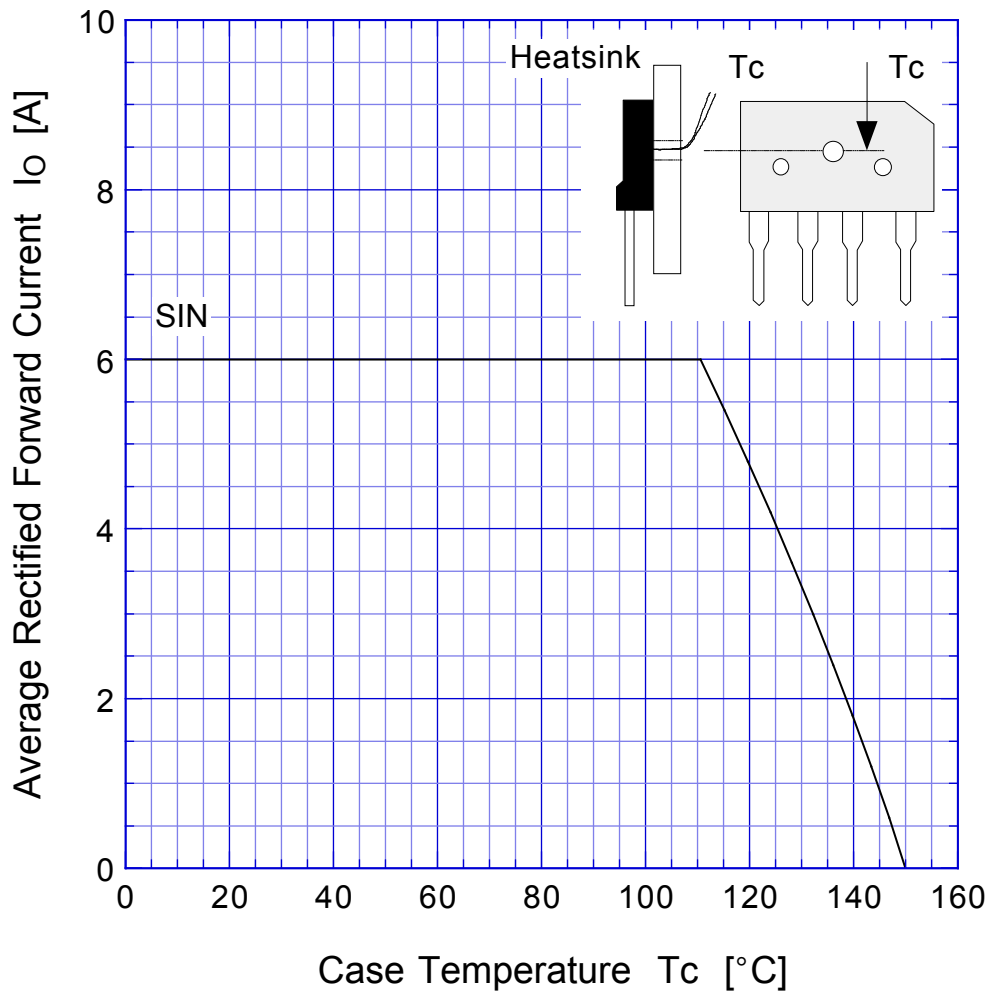
Forward Power Dissipation



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

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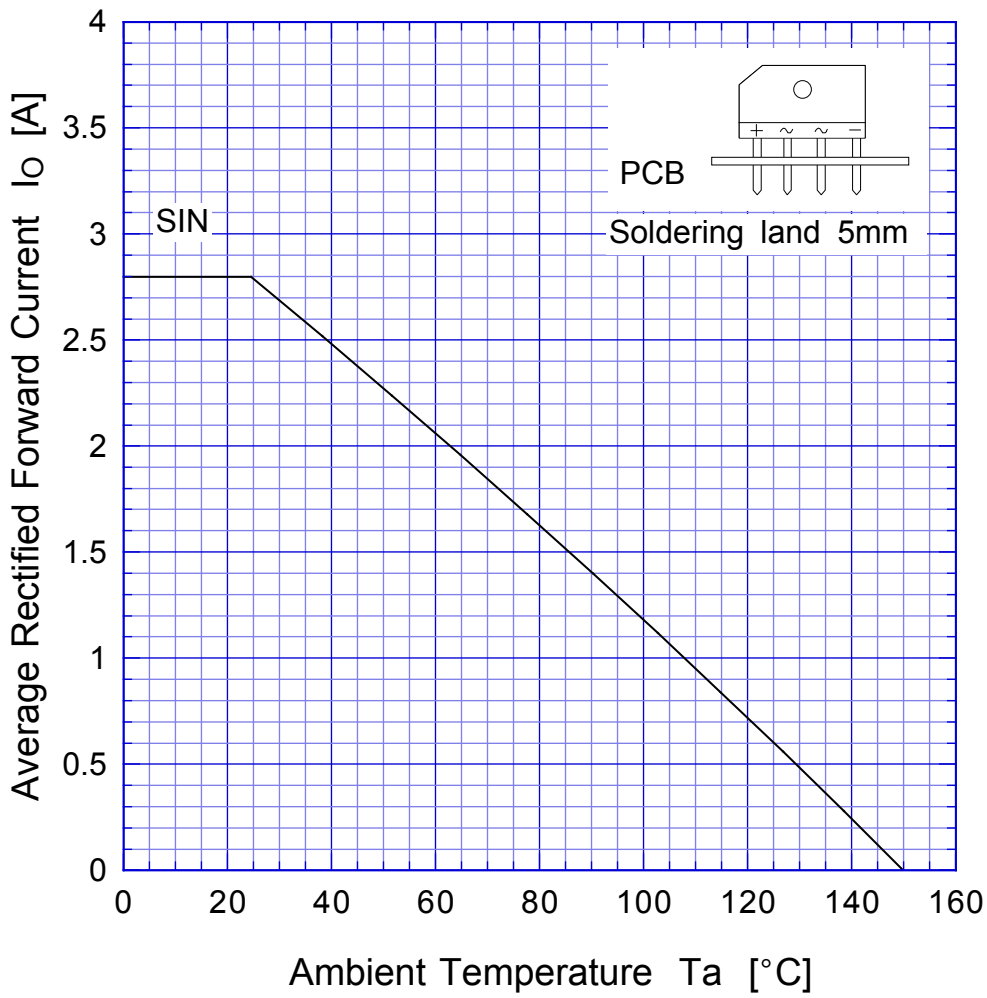
Derating Curve



Sine wave
R-load
with heatsink

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Derating Curve



$V_R = 600V$



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Peak Surge Forward Capability

