

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D15XB60

600V 15A

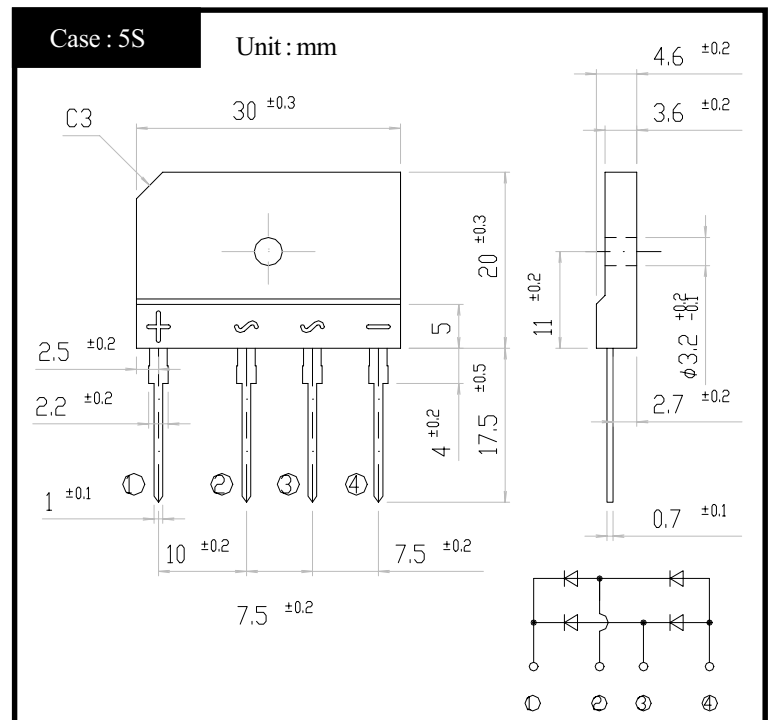
FEATURES

- Thin Single In-Line Package
- High current capacity with Small Package
- High IFSM
- Superior Thermal Conductivity

APPLICATION

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

OUTLINE DIMENSIONS



RATINGS

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

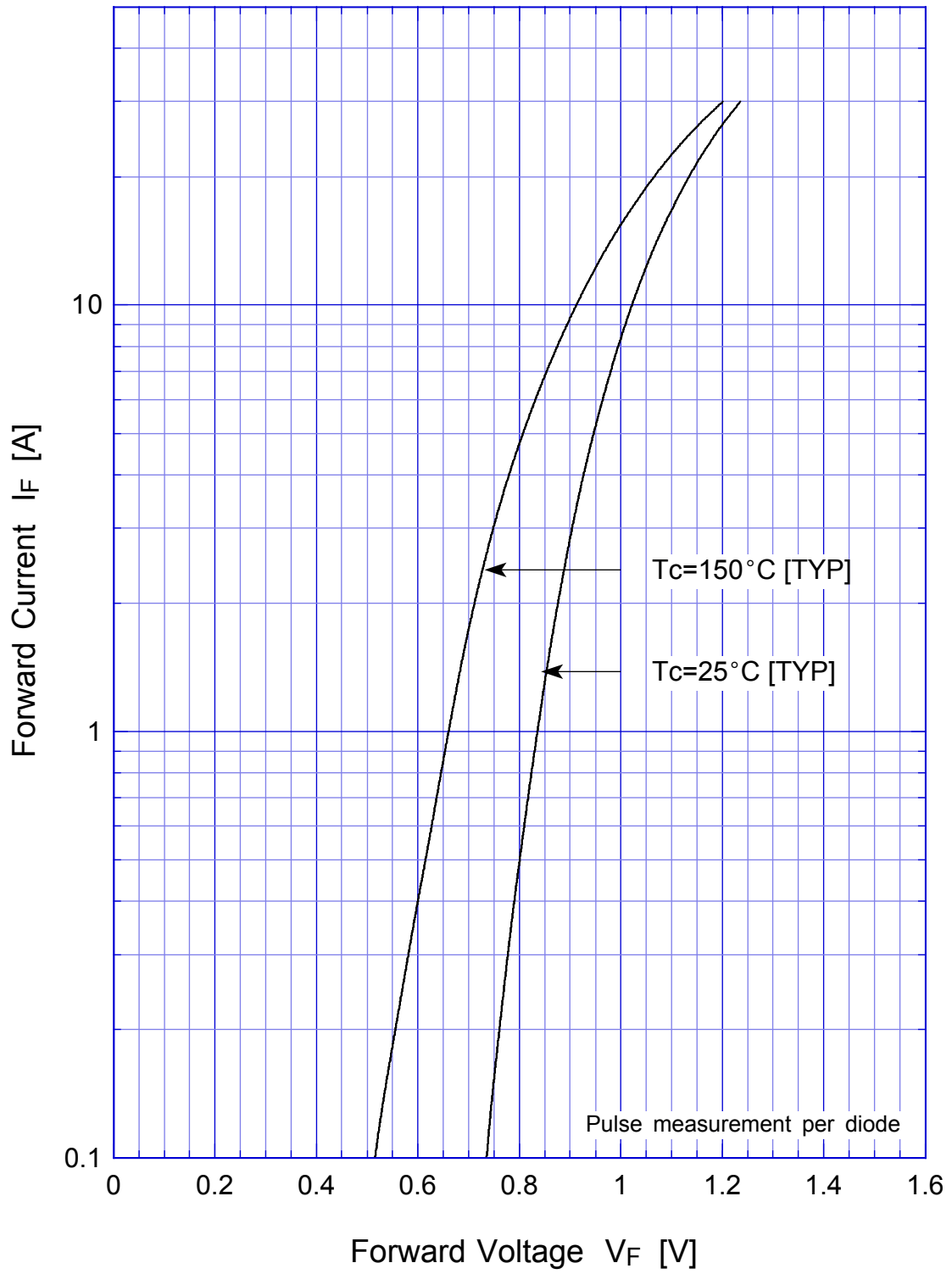
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|------------------|--|---------|------------------|
| Storage Temperature | T _{stg} | | -40~150 | °C |
| Operating Junction Temperature | T _j | | 150 | °C |
| Maximum Reverse Voltage | V _{RM} | | 600 | V |
| Average Rectified Forward Current | I _O | 50Hz sine wave, R-load With heatsink T _c =100°C | 15 | A |
| | | 50Hz sine wave, R-load Without heatsink T _a =25°C | 3.2 | |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1cycle peak value, T _j =25°C | 200 | A |
| Current Squared Time | I ² t | 1ms ≤ t < 10ms T _j =25°C | 110 | A ² s |
| Dielectric Strength | V _{dis} | Terminals to case, AC 1 minute | 2.5 | kV |
| Mounting Torque | TOR | (Recommended torque : 0.5N·m) | 0.8 | N·m |

●Electrical Characteristics (If not specified Tc=25°C)

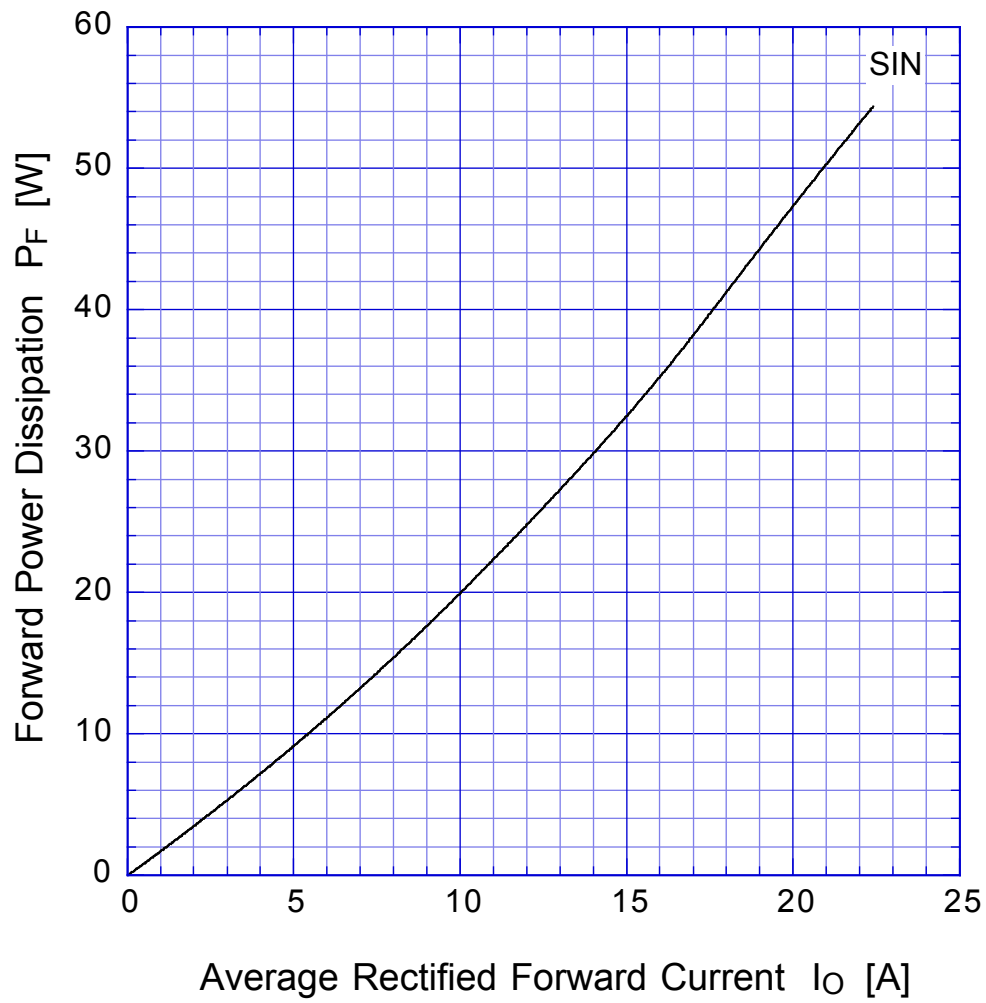
| Item | Symbol | Conditions | Ratings | Unit |
|--------------------|-----------------|--|---------|------|
| Forward Voltage | V _F | I _F =7.5A, Pulse measurement, Rating of per diode | Max.1.1 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement, Rating of per diode | Max.10 | μA |
| Thermal Resistance | θ _{jc} | junction to case With heatsink | Max.1.5 | °C/W |
| | θ _{jl} | junction to lead Without heatsink | Max.5 | |
| | θ _{ja} | junction to ambient Without heatsink | Max.22 | |

D15XBx

Forward Voltage



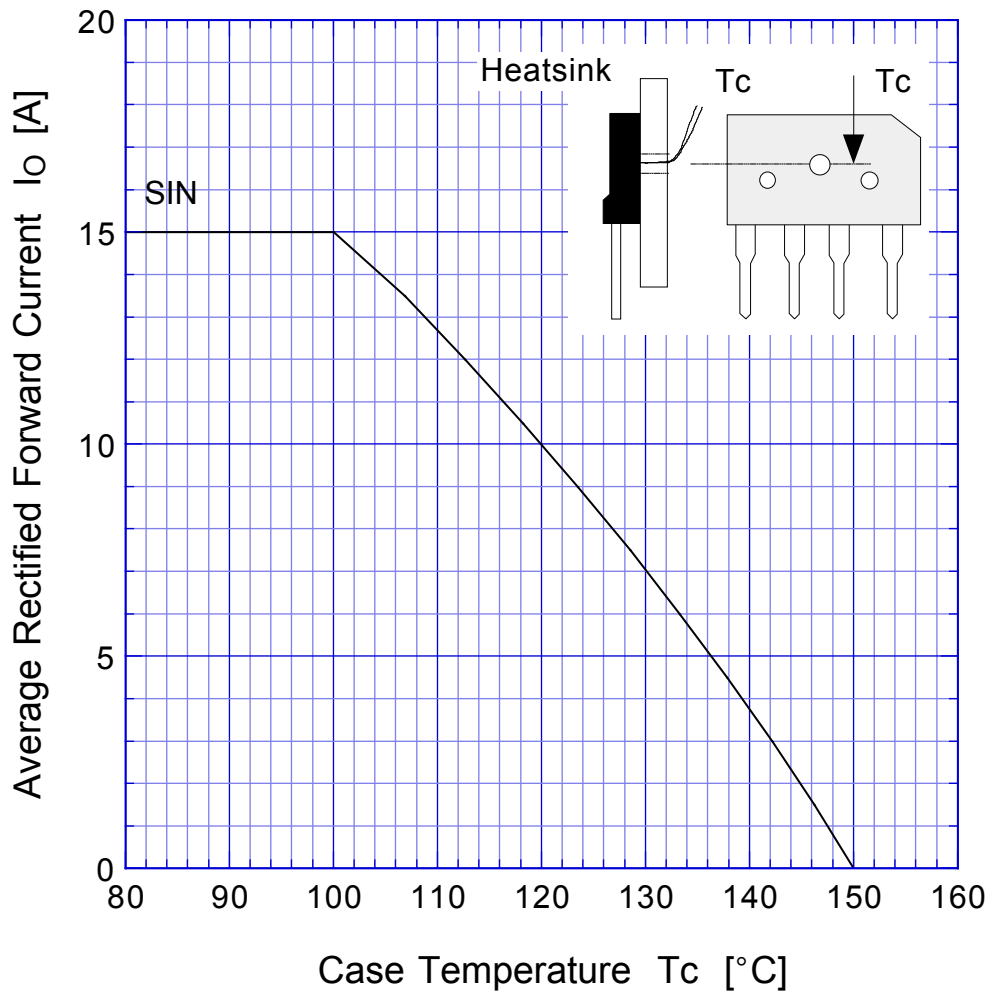
D15XBx Forward Power Dissipation



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

D15XBx

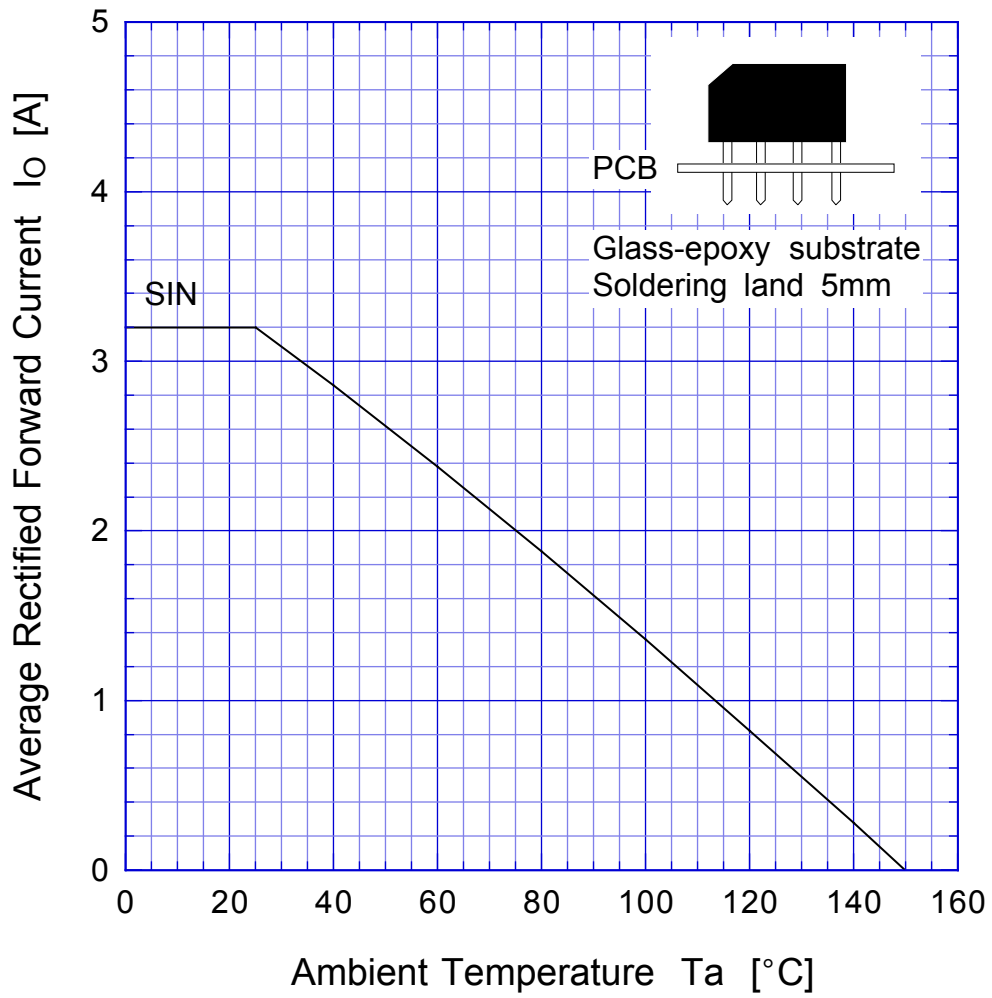
Derating Curve



Sine wave
R-load
with heatsink

D15XBx

Derating Curve



Sine wave
R-load
Free in air

D15XBx

Peak Surge Forward Capability

