# SHINDENGEN

## General Purpose Rectifiers

**SIL Bridges**

# D15XB80

**800V 15A**

## FEATURES

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

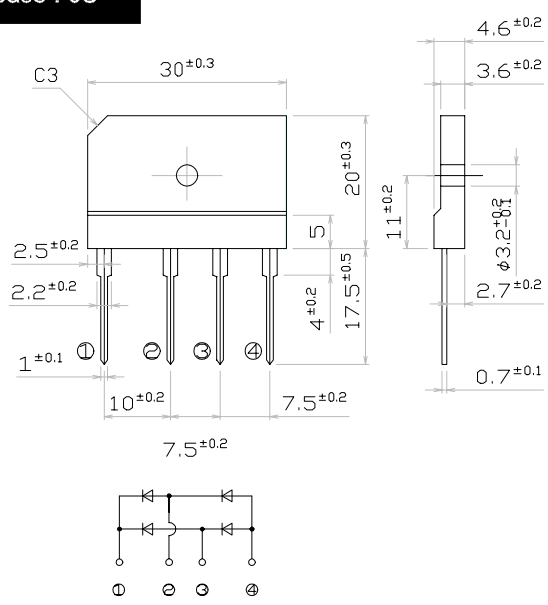
## APPLICATION

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

## OUTLINE DIMENSIONS

Case : 5S

Unit : mm




## RATINGS

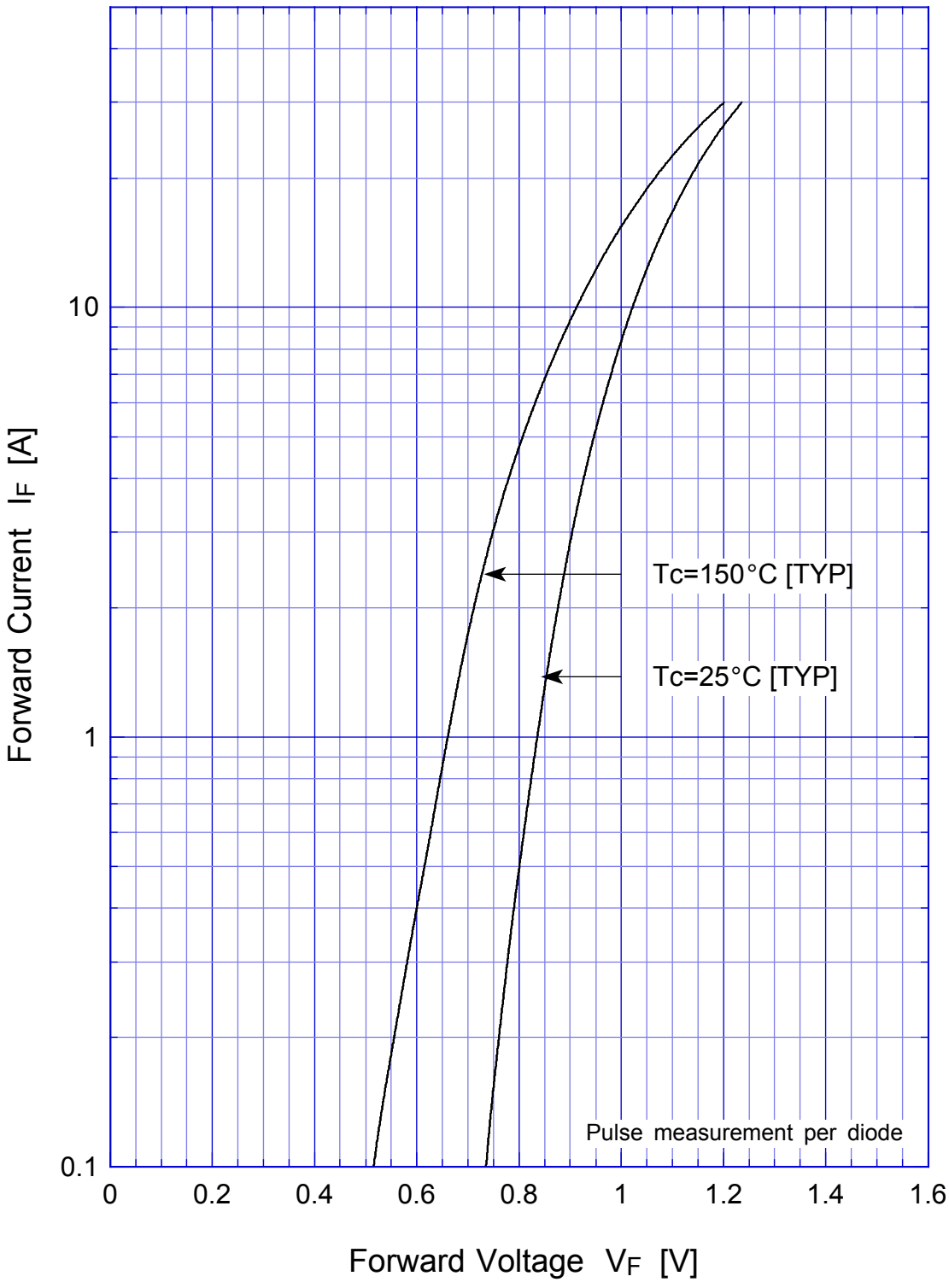
● Absolute Maximum Ratings (If not specified Tc=25℃)

| Item | Symbol | Conditions | Ratings | Unit |
|---|---|---|---|---|
| Storage Temperature | Tstg | | −40～150 | ℃ |
| Operating Junction Temperature | Tj | | 150 | ℃ |
| Maximum Reverse Voltage | $V_{RM}$ | | 800 | V |
| Average Rectified Forward Current | $I_O$ | 50Hz sine wave, R-load With heatsink Tc=100℃ | 15 | A |
| | | 50Hz sine wave, R-load Without heatsink Ta=25℃ | 3.2 | |
| Peak Surge Forward Current | $I_{FSM}$ | 50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25℃ | 200 | A |
| Current Squared Time | $I^2t$ | 1ms≦t＜10ms Tj=25℃ | 110 | $A^2s$ |
| Dielectric Strength | Vdis | Terminals to case, AC 1 minute | 2.5 | kV |
| Mounting Torque | TOR | (Recommended torque : 0.5N･m) | 0.8 | N･m |

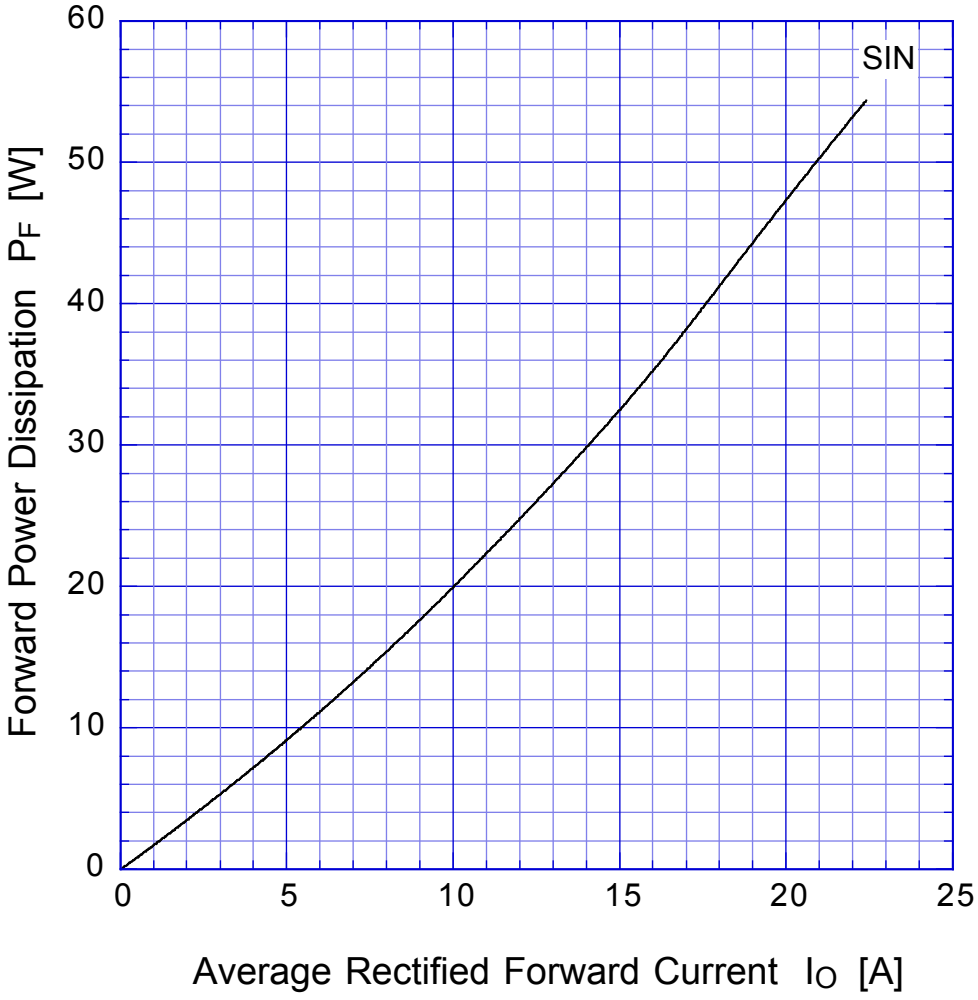
● Electrical Characteristics (If not specified Tc=25℃)

| 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 | ℃/W |
| | θ jl | junction to lead Without heatsink | Max.5 | |
| | θ ja | junction to ambient Without heatsink | Max.22 | |

D15XBx Forward Voltage

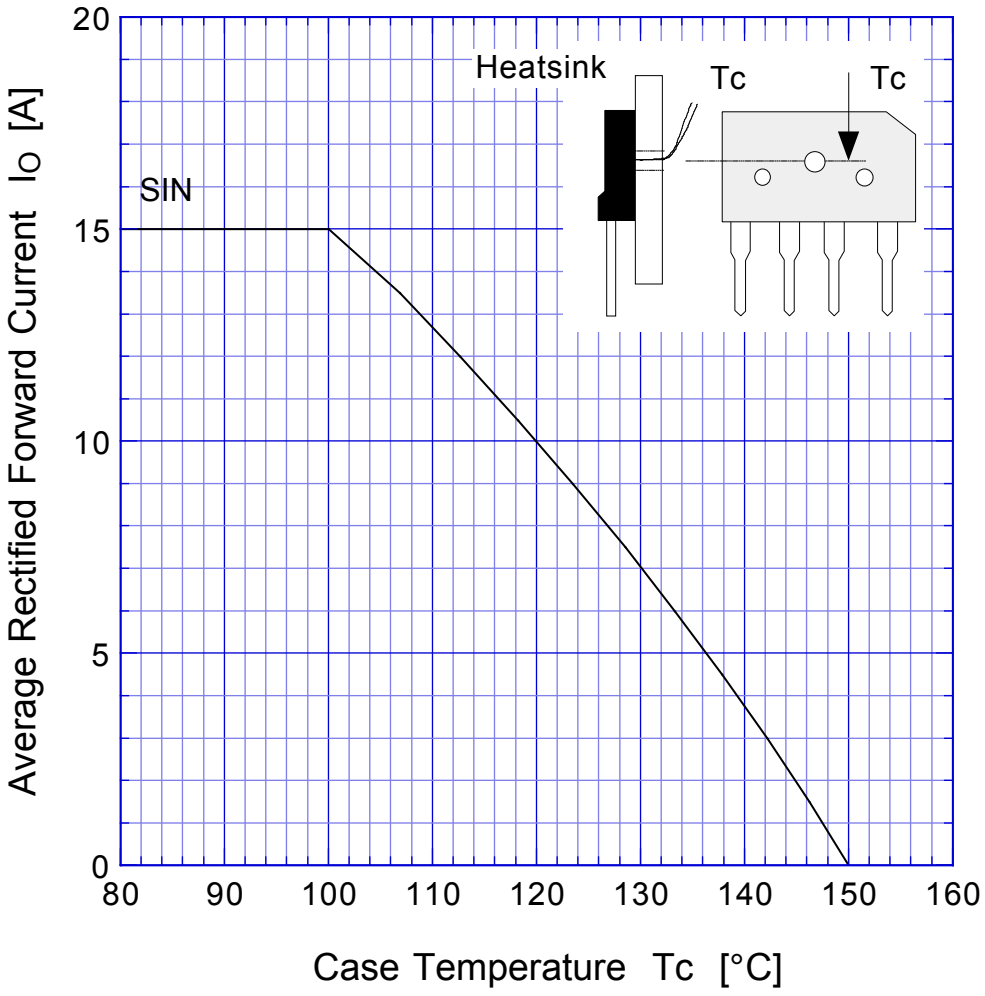


# D15XBx Forward Power Dissipation



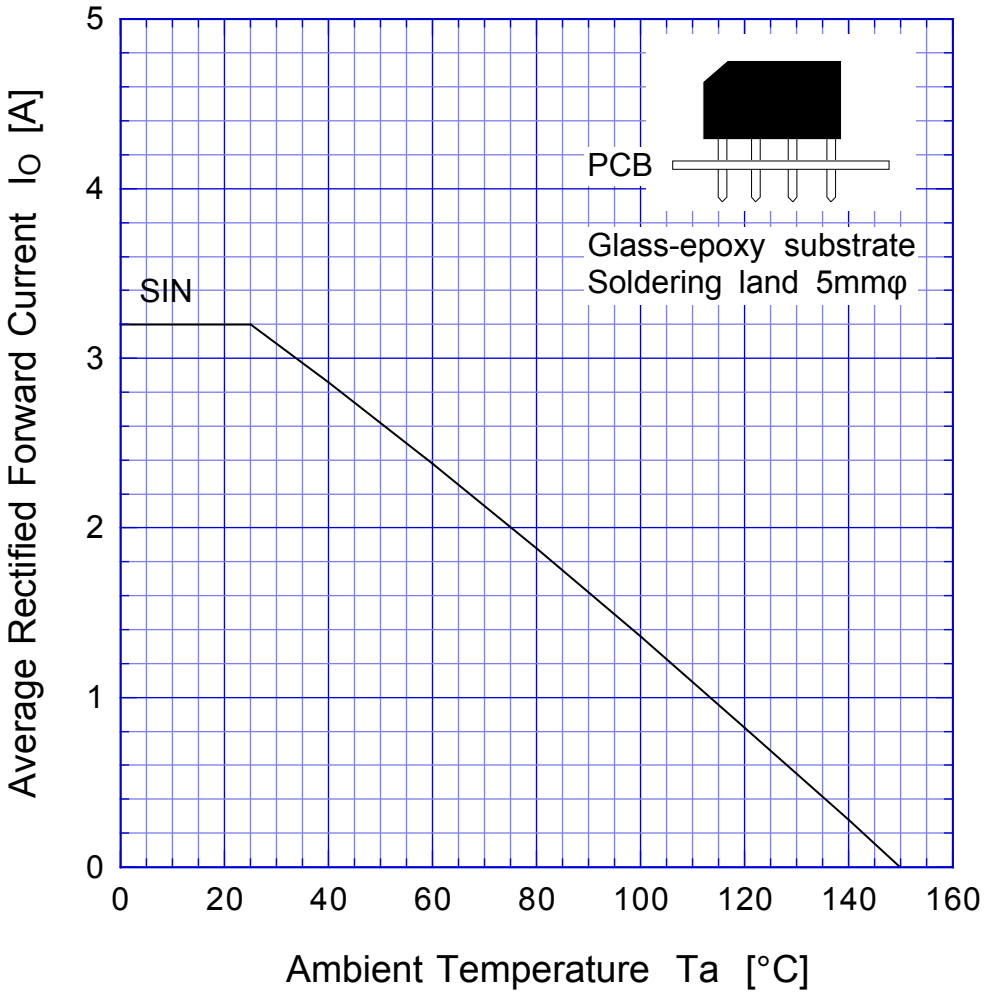

Tj = 150°C
Sine wave

# D15XBx Derating Curve




Sine wave
R-load
with heatsink

# D15XBx Derating Curve




Sine wave
R-load
Free in air

# D15XBx Peak Surge Forward Capability