

SHINDENGEN

Bridge Diode

Square In-line Package

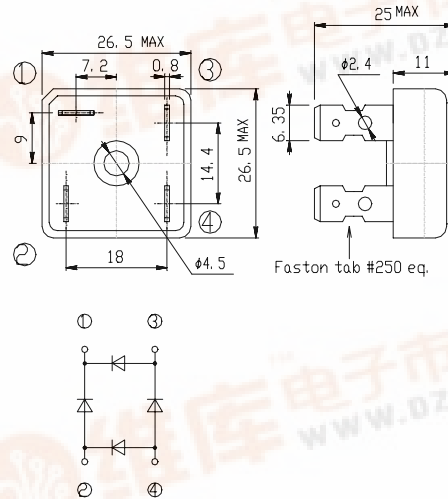
S15VB20

200V 15A

OUTLINE DIMENSIONS

Case : S15VB

Unit : mm



RATINGS

Absolute Maximum Ratings

| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|------------------|--|---------|------------------|
| Storage Temperature | T _{stg} | | -40~150 | °C |
| Operating Junction Temperature | T _j | | 150 | °C |
| Maximum Reverse Voltage | V _{RM} | | 200 | V |
| Average Rectified Forward Current | I _O | 50Hz sine wave, R-load With heatsink, T _c =83°C | 15 | A |
| | | 50Hz sine wave, R-load Without heatsink, T _a =40°C | 4.5 | |
| 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 | 2ms ≤ t < 10ms T _c =25°C | 200 | A ² s |
| Dielectric Strength | V _{dis} | Terminals to case, AC 1 minute | 2 | kV |
| Mounting Torque | TOR | (Recommended torque : 1N·m) | 2 | N·m |

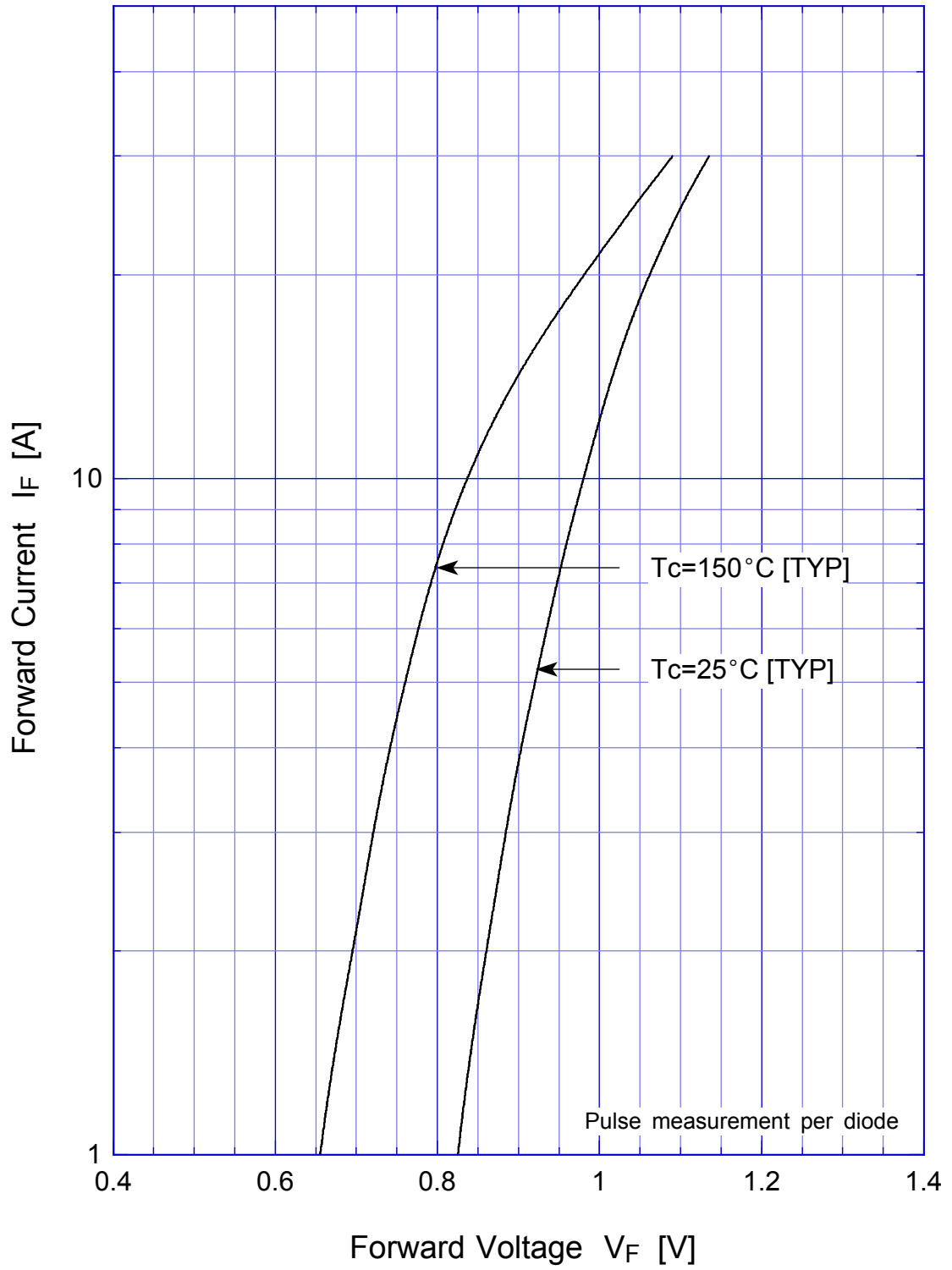
Electrical Characteristics (T_c=25°C)

| Item | Symbol | Conditions | Ratings | Unit |
|--------------------|-----------------|--|----------|------|
| Forward Voltage | V _F | I _F =7.5A, 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 | Max.2.3 | °C/W |

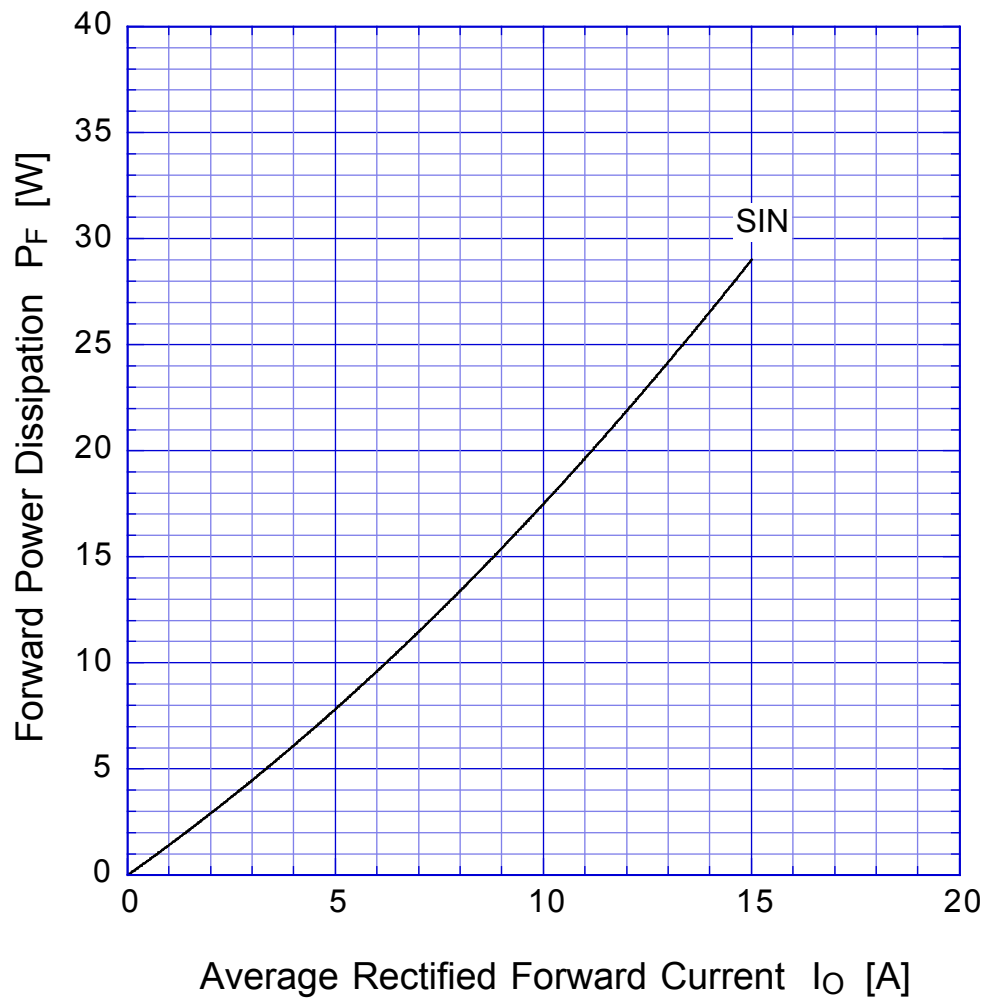


S15VBx

Forward Voltage



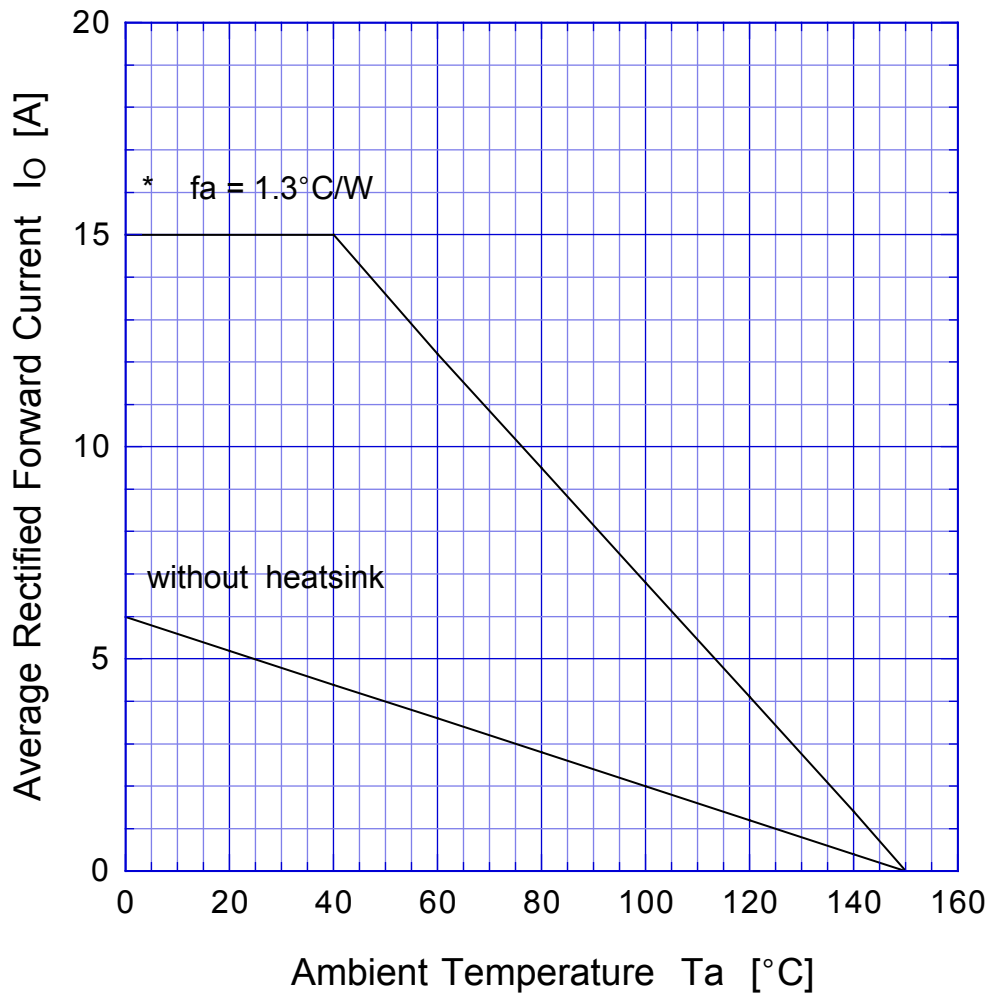
S15VBx Forward Power Dissipation



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

S15VBx

Derating Curve



Sine wave

R-load

Free in air

* with thermal compound, TOR=5kg-cm

S15VBx

Peak Surge Forward Capability

