

SHINDENGEN

General Purpose Rectifiers

SIL Bridges

D10XB20

200V 10A

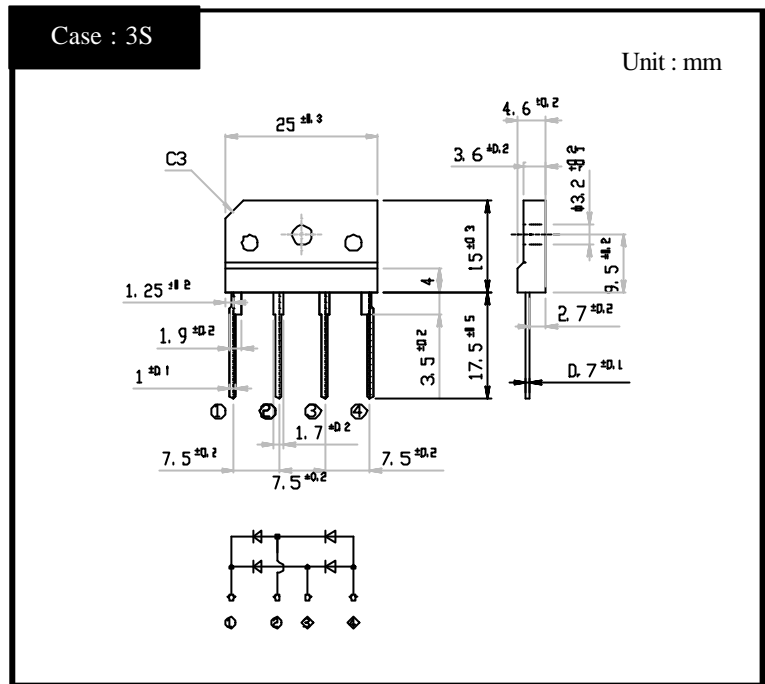
FEATURES

- 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

OUTLINEDIMENSIONS



RATINGS

Absolute Maximum Ratings (If not specified Tc=25)

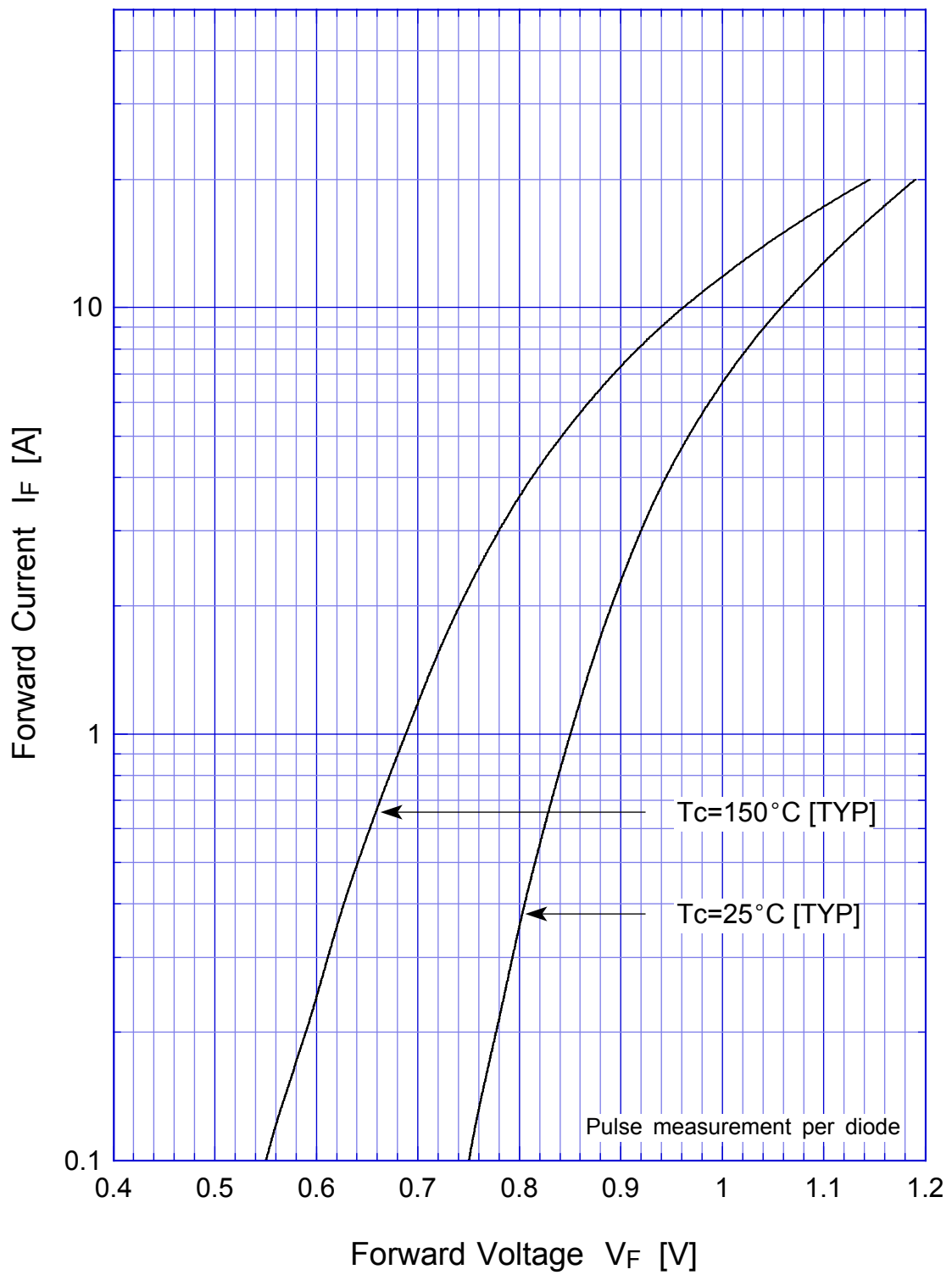
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|------------------|---|-----------|------------------|
| Storage Temperature | Tstg | | -40 ~ 150 | |
| Operating Junction Temperature | Tj | | 150 | |
| Maximum Reverse Voltage | V _{RM} | | 200 | V |
| Average Rectified Forward Current | I _O | 50Hz sine wave, R-load With heatsink Tc=100 | 10 | A |
| | | 50Hz sine wave, R-load Without heatsink Ta=25 | 2.7 | |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1cycle peak value, Tj=25 | 120 | A |
| Current Squared Time | I ² t | 1ms t < 10ms Tj=25 | 60 | 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)

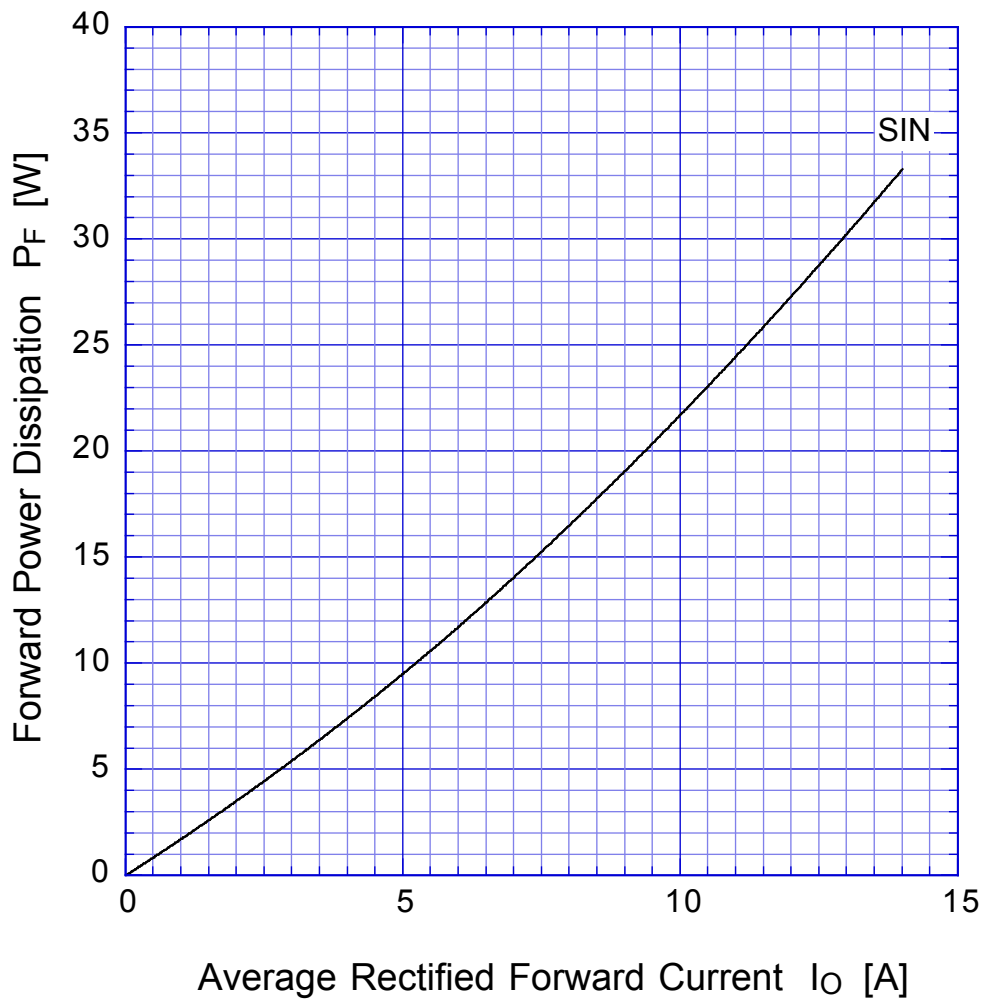
| Item | Symbol | Conditions | Ratings | Unit |
|--------------------|----------------|--|---------|------|
| Forward Voltage | V _F | I _F =5A, Pulse measurement, Rating of per diode | Max.1.1 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement, Rating of per diode | Max.10 | μA |
| Thermal Resistance | j-c | junction to case With heatsink | Max.2.3 | /W |
| | j-l | junction to lead Without heatsink | Max.6 | |
| | j-a | junction to ambient Without heatsink | Max.26 | |

D10XBx

Forward Voltage



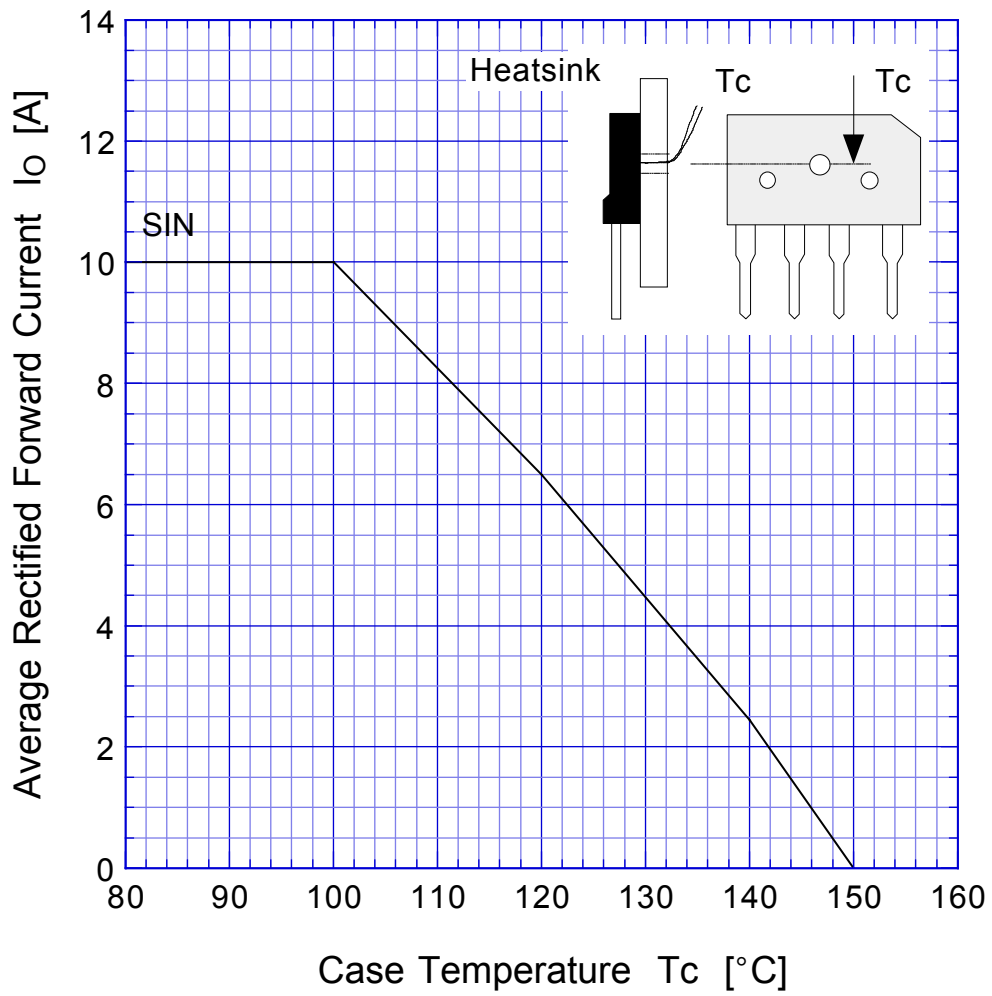
D10XBx Forward Power Dissipation



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

D10XBx

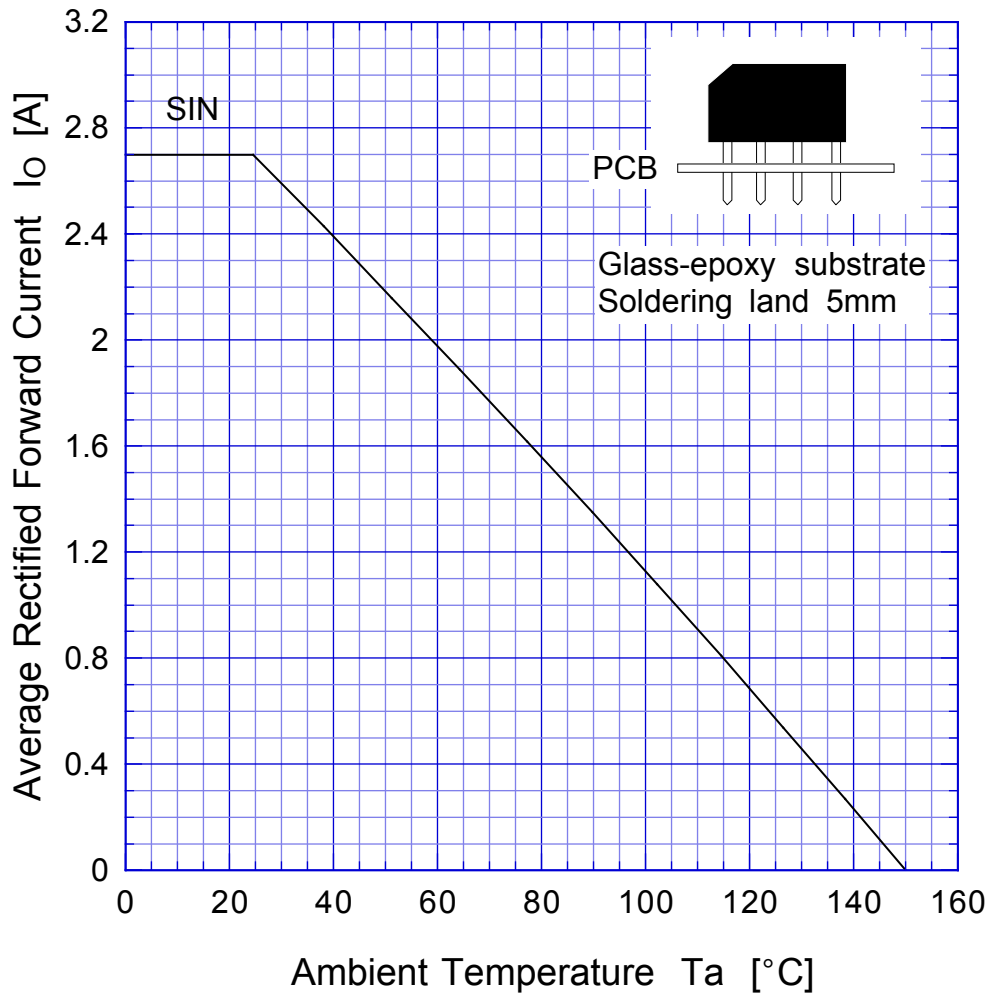
Derating Curve



Sine wave
R-load
with heatsink

D10XBx

Derating Curve



Sine wave
R-load
Free in air

D10XBx

Peak Surge Forward Capability

