

SHINDENGEN

Super Fast Recovery Rectifiers

Modules

D200LC40B

400V 200A

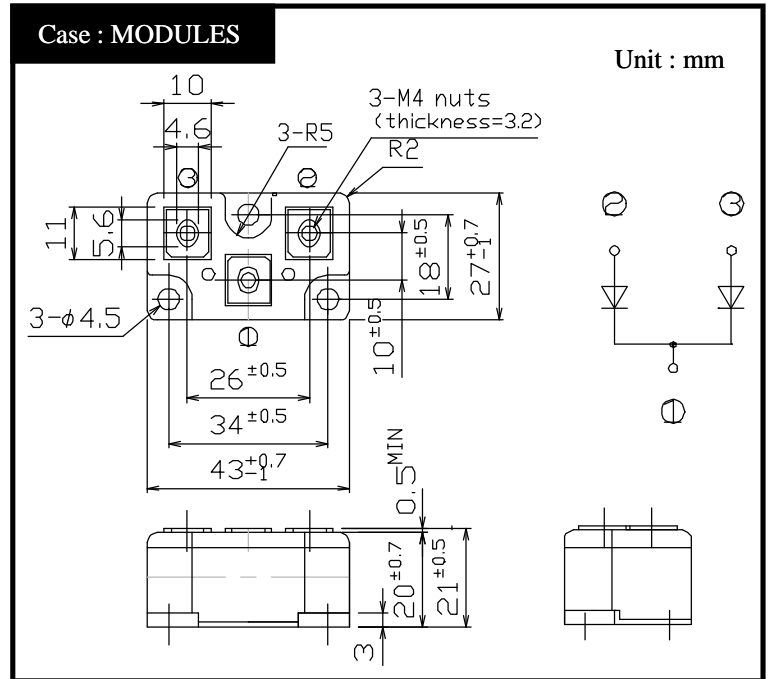
FEATURES

- High current capacity
- trr150ns
- Insulated Package

APPLICATION

- Semiconductor Production Equipment
- Big Power Supply
- Factory Automation, Robot

OUTLINE DIMENSIONS



RATINGS

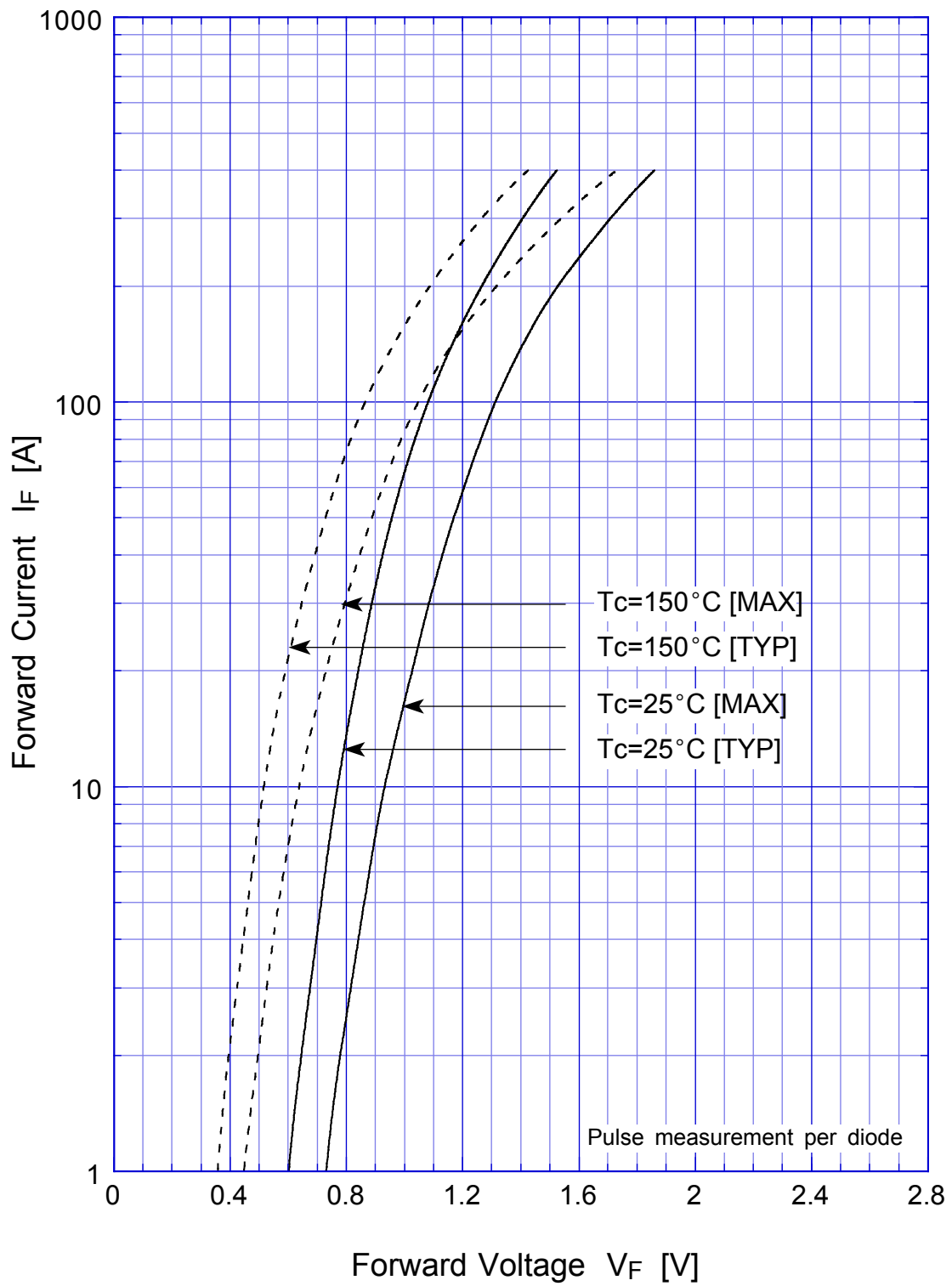
Absolute Maximum Ratings (If not specified Tc=25)

| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|------------------|--|-----------|------|
| Storage Temperature | Tstg | | -40 ~ 150 | |
| Operating Junction Temperature | Tj | | 150 | |
| Maximum Reverse Voltage | V _{RM} | | 400 | V |
| Average Rectified Forward Current | I _O | 50Hz sine wave, R-load, Rating for each arm I _o /2, Tc=52 | 200 | A |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, Rating of per arm Tj=25 | 1400 | A |
| Dielectric Strength | V _{dis} | Terminals to case, AC 1 minute | 1.5 | kV |
| Mounting Torque | TOR | | 1.7 | N·m |

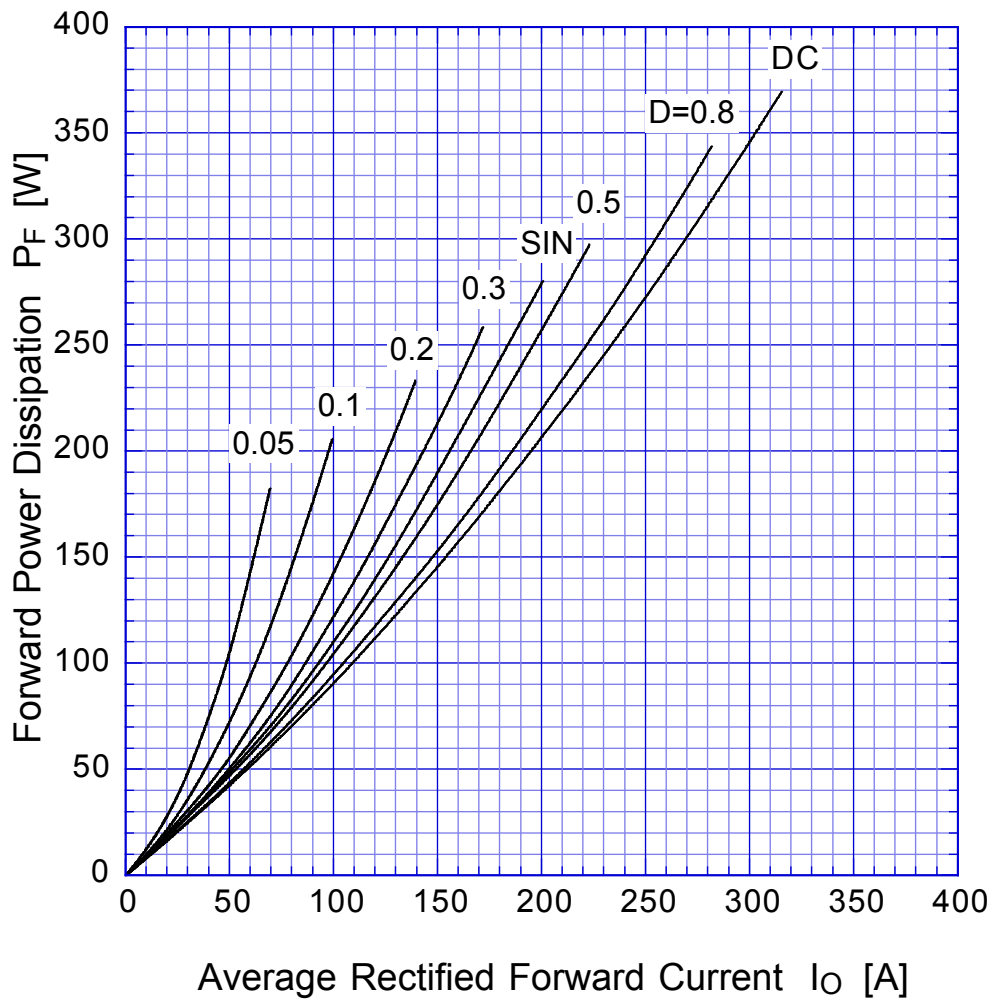
Electrical Characteristics (If not specified Tc=25)

| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------|----------------|--|----------|------|
| Forward Voltage | V _F | I _F =100A, Pulse measurement, Rating of per arm | Max.1.3 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement, Rating of per arm | Max.50 | μ A |
| Reverse Recovery Time | trr | I _F =0.5A, I _R =1A, Rating of per arm | Max.150 | ns |
| Thermal Resistance | jc | junction to case | Max.0.35 | /W |

D200LC40B Forward Voltage



D200LC40B Forward Power Dissipation

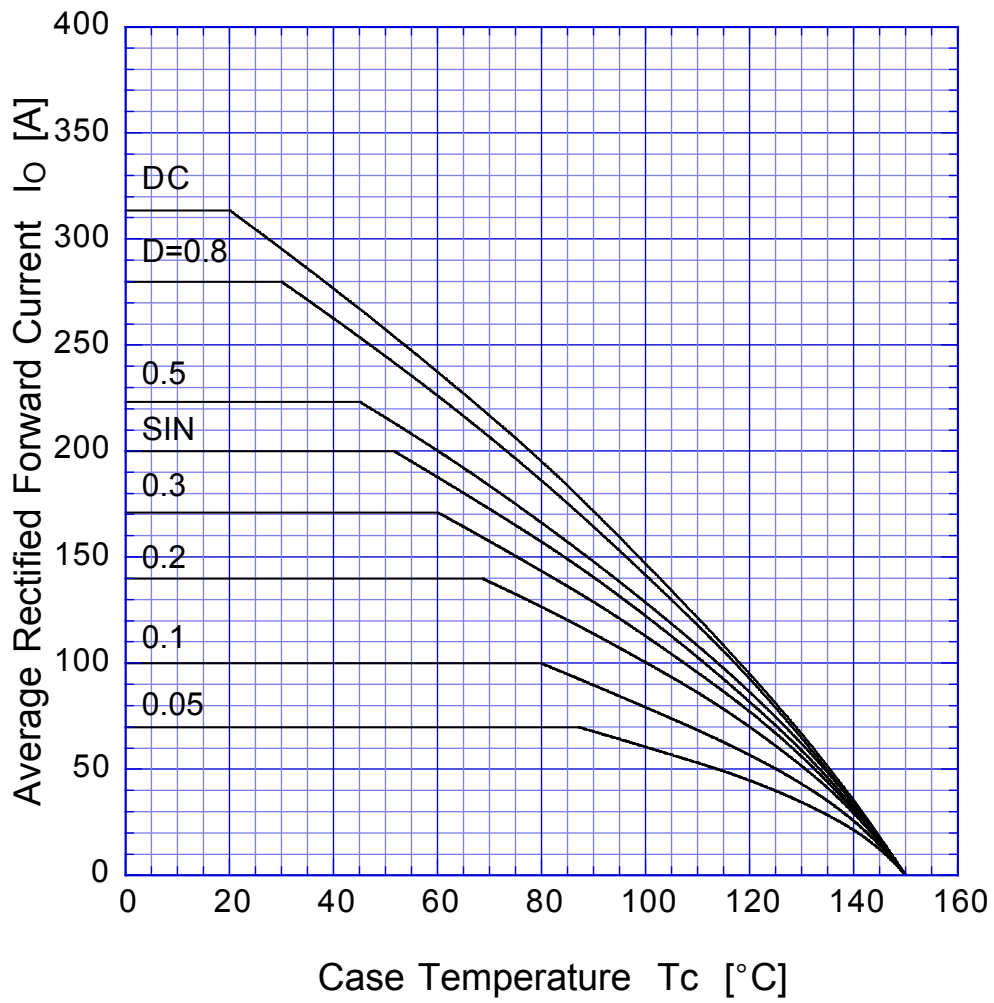


$T_j = T_{jmax}$



D200LC40B

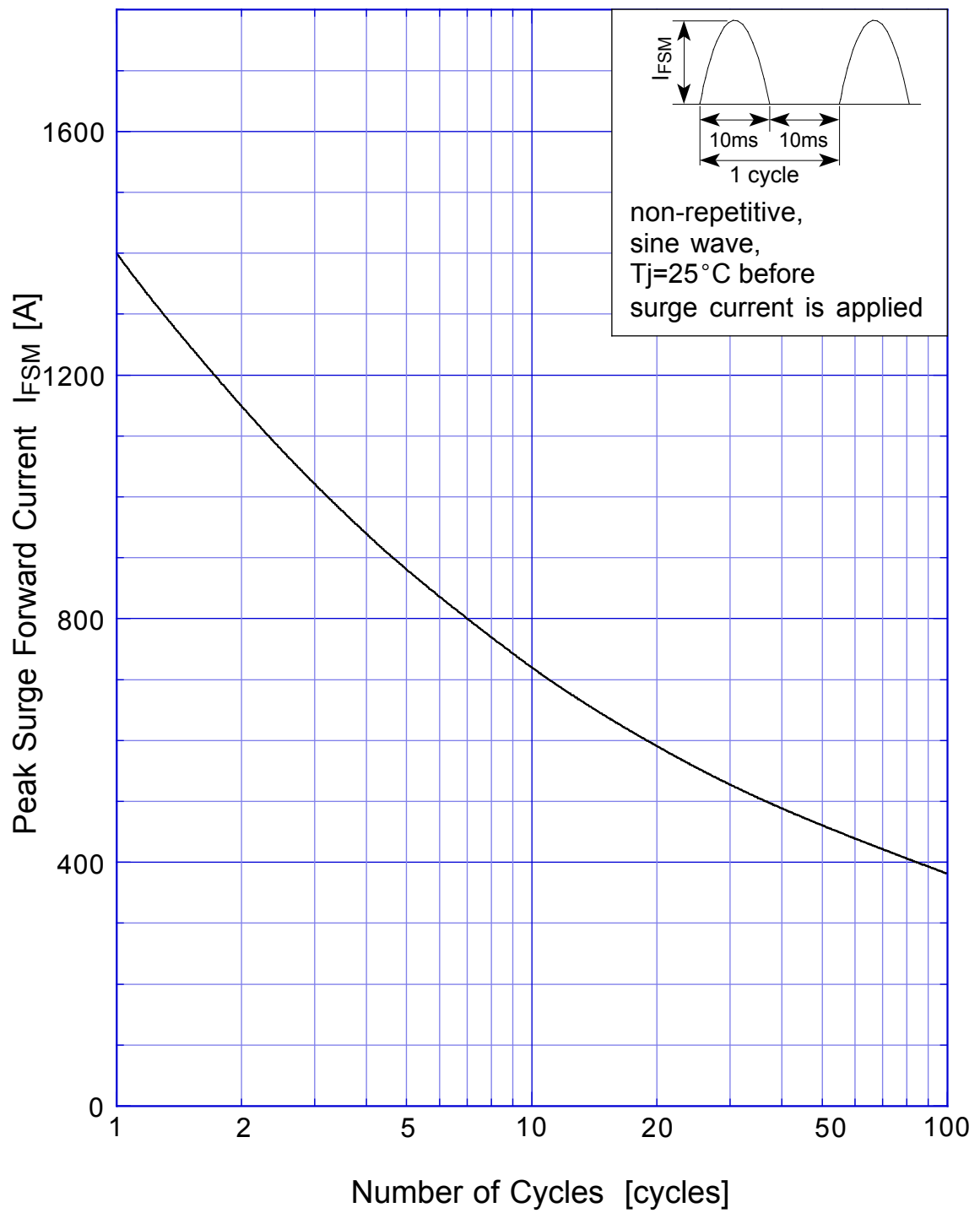
Derating Curve



$$V_R = V_{RM}$$



D200LC40B Peak Surge Forward Capability



D200LC40B Junction Capacitance

