



MDQ200



Single Phase Rectifier Bridge

VRRM 800 to 1800V

ID 200Amp

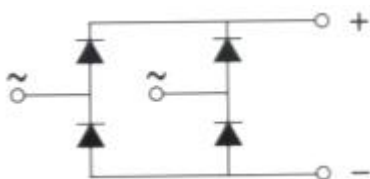
Applications

Single phase rectifiers for power supplies

Rectifiers for DC motor field supplies

Battery charger rectifiers

Input rectifiers for variable frequency drives



Features

Single phase bridge rectifier

Blocking voltage:800 to 1800V

Module Type

| TYPE | VRRM | VRSM |
|-----------|-------|-------|
| MDQ200-08 | 800V | 900V |
| MDQ200-12 | 1200V | 1300V |
| MDQ200-16 | 1600V | 1700V |
| MDQ200-18 | 1800V | 1900V |

Maximum Ratings

| Symbol | Conditions | Values | Units |
|-----------|---|------------|----------------------|
| I_D | $T_c=85^{\circ}\text{C}$ | 200 | A |
| IFSM | $T_{vj}=45^{\circ}\text{C}$ t=10ms (50HZ), sine | 2000 | A |
| i^2t | $T_{vj}=45^{\circ}\text{C}$ t=10ms (50HZ), sine | 9000 | A^2S |
| Viso | a.c.50HZ;r.m.s.;1min | 2500 | V |
| T_{vj} | | -40 to 150 | $^{\circ}\text{C}$ |
| T_{stg} | | -40 to 125 | $^{\circ}\text{C}$ |
| Weight | Module (Approximately) | | g |

Thermal Characteristics

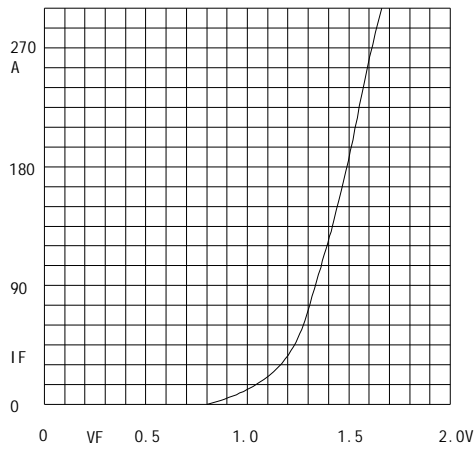
| Symbol | Conditions | Values | Units |
|---------------|------------|--------|-----------------------------|
| $R_{th(j-c)}$ | Per module | 0.14 | $^{\circ}\text{C}/\text{W}$ |

Electrical Characteristics

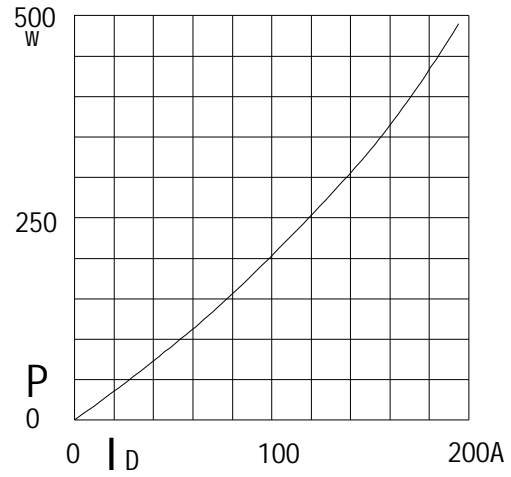
| Symbol | Conditions | Values | Units |
|--------|---------------------------------------|------------|-------|
| VFM | $T=25^{\circ}\text{C}$ IFM=200A | 1.50 | V |
| IRD | $T_{vj}=25^{\circ}\text{C}$ VRD=VRRM | ≤ 0.5 | mA |
| | $T_{vj}=150^{\circ}\text{C}$ VRD=VRRM | ≤ 5 | mA |



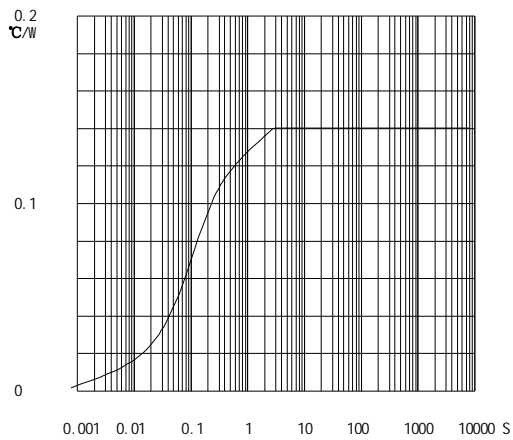
MDQ200



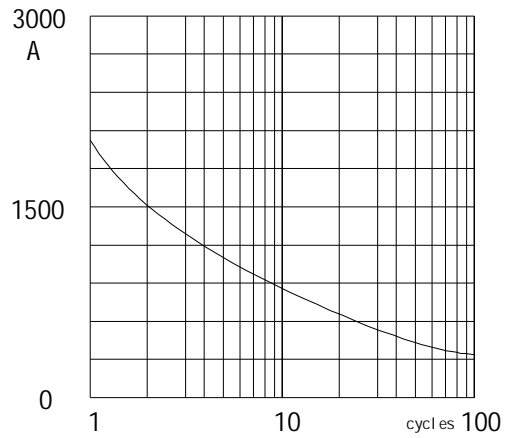
Forward Characteristics



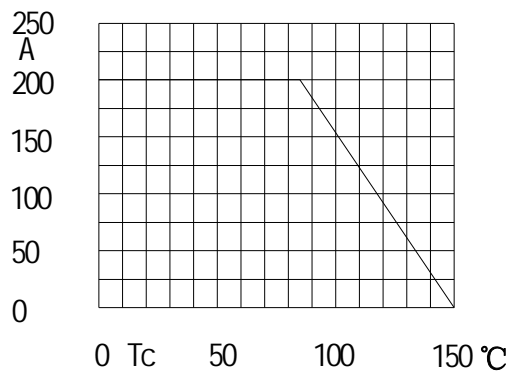
Power dissipation



Transient thermal impedance



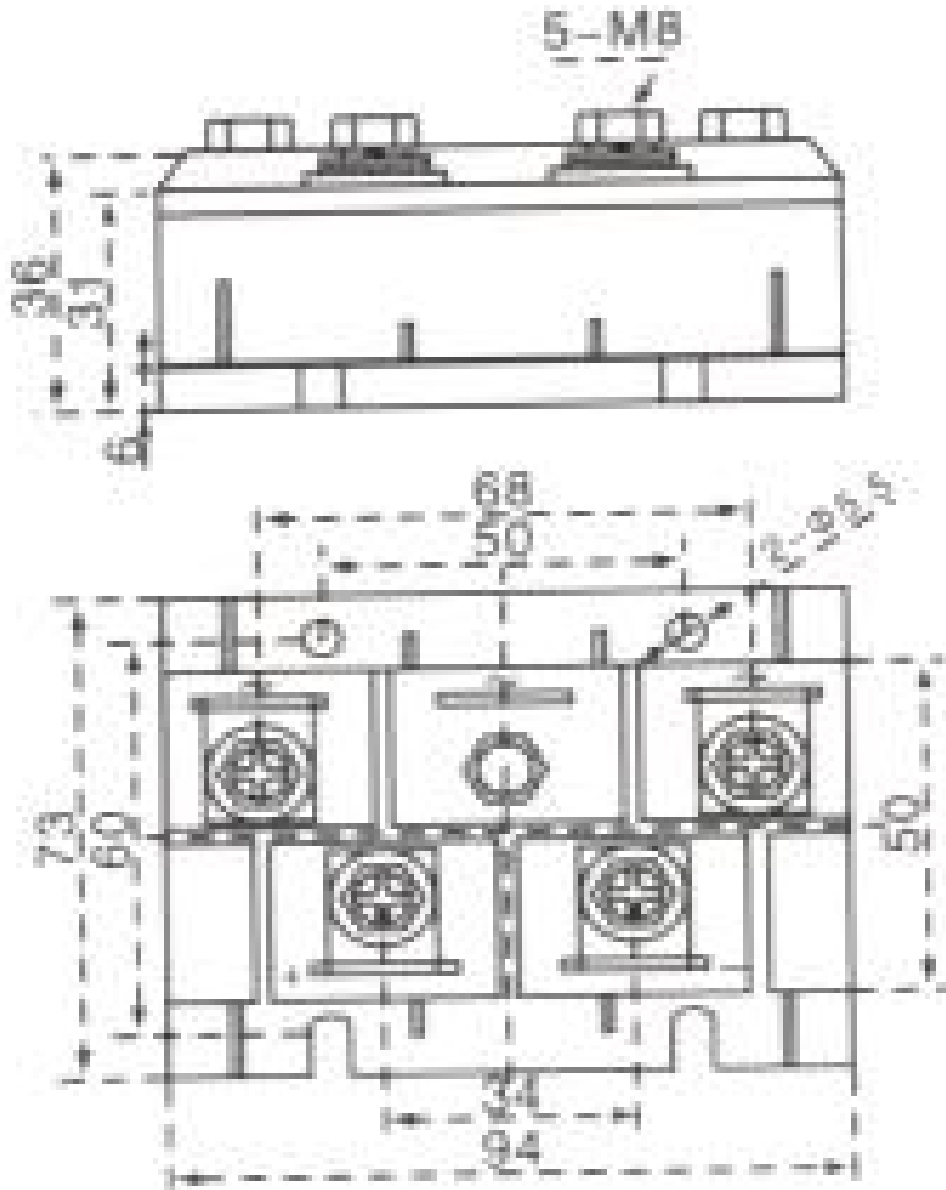
Max Non-Repetitive Forward Surge Current



Forward Current Derating Curve



MDQ200



Dimensions in mm