

Features

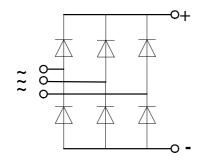
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Heat Transfer Through Aluminum Oxide DBC Ceramic Isolated Metal Baseplate
- Blocking voltage:800 to 1800V
- Glass passivated chip

Applications

- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

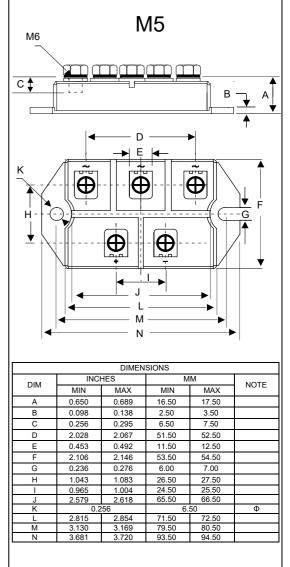
| MCC Part Number | V _{RRM} | V _{RSM} |
|-----------------|------------------|------------------|
| MD200S08M5 | 800V | 900V |
| MD200S12M5 | 1200V | 1300V |
| MD200S16M5 | 1600V | 1700V |
| MD200S18M5 | 1800V | 1900V |





Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

200 Amp GLASS PASSIVATED THREE PHASE RECTIFIER BRIDGE 800~1800 Volts





Maximum Ratings

| Symbol | Conditions | Values | Units |
|------------------|--------------------------------|-------------|------------------|
| lD | Three phase, full wave Tc=100℃ | 200 | A |
| IFSM | t=10mS Tvj =45℃ | 2240 | A |
| i ² t | t=10mS Tvj =45℃ | 25000 | A ² s |
| Visol | a.c.50HZ;r.m.s.;1min | 3000 | V |
| Tvj | | -40 to +150 | °C |
| Tstg | | -40 to +125 | °C |
| Mt | To terminals(M6) | 5±15% | Nm |
| Ms | To heatsink(M6) | 5±15% | Nm |
| Weight | Module (Approximately) | 194 | g |

Thermal Characteristics

| Symbol | Conditions | Values | Units |
|----------|------------------------|--------|-------|
| Rth(j-c) | Per diode | 0.45 | °C/W |
| Rth(c-s) | Module (Approximately) | 0.025 | °C/W |

Electrical Characteristics

| Symbol | I Conditions | | Values | 5 | Units |
|--------|---------------------------------------|------|--------|----------|----------|
| Symbol | Conditions | Min. | Тур. | Max. | Units |
| Vfm | T=25℃ IF =300A | | 1.45 | 1.70 | V |
| Ird | Tvj=25℃ VRD=VRRM Tvj=150℃ VRD=VRRM | | _ | 0.5 6 | mA mA |



Performance Curves

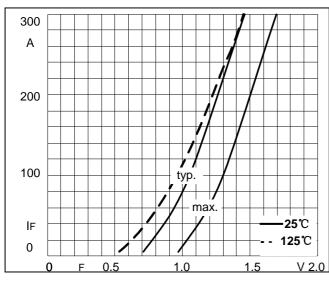


Fig1. Forward Characteristics

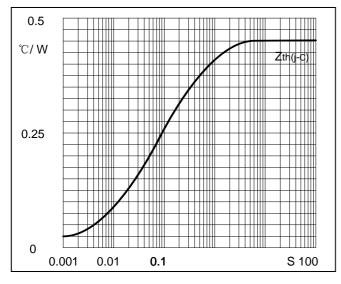


Fig3. Transient thermal impedance

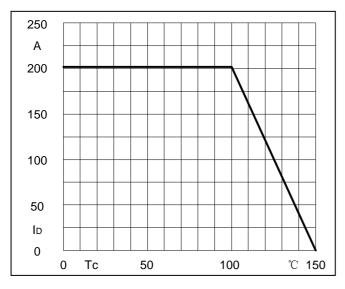


Fig5.Forward Current Derating Curve

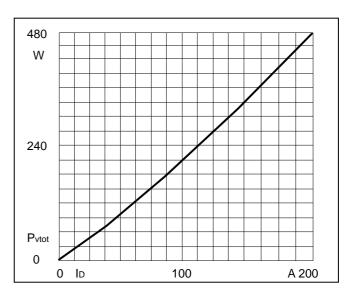


Fig2. Power dissipation

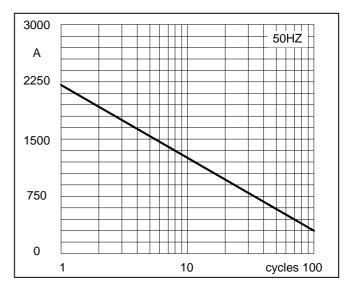


Fig4. Max Non-Repetitive Forward Surge Current



Ordering Information

| Device | Packing |
|----------------|-----------------------------|
| Part Number-BP | Bulk: 10PCS/BOX ;100PCS/CTN |

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