

Features

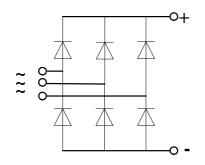
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Heat Transfer Through Aluminum Oxide DBC Ceramic Isolated Metal Baseplate
- Blocking voltage:1600 V
- · Glass passivated chip

Applications

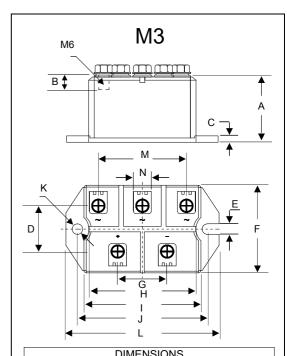
- Three phase rectifiers for power supplies
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

| MCC Part Number | V_{RRM} | V_{RSM} |
|-----------------|-----------|-----------|
| MD200S16M3 | 1600V | 1700V |





200 Amp GLASS PASSIVATED THREE PHASE RECTIFIER BRIDGE 1600 Volts



| DIMENSIONS | | | | | | |
|------------|-------|-------|-------|-------|------|--|
| DIM | INC | HES | MM | | NOTE | |
| DIIVI | MIN | MAX | MIN | MAX | NOIL | |
| Α | 1.165 | 1.213 | 29.60 | 30.80 | | |
| В | 0.236 | 0.315 | 6.00 | 8.00 | | |
| С | 0.098 | 0.138 | 2.50 | 3.50 | | |
| D | 1.043 | 1.083 | 26.50 | 27.50 | | |
| E | 0.236 | 0.276 | 6.00 | 7.00 | | |
| F | 2.106 | 2.146 | 53.50 | 54.50 | | |
| G | 0.965 | 1.004 | 24.50 | 25.50 | | |
| Н | 2.579 | 2.618 | 65.50 | 66.50 | | |
| I | 2.815 | 2.854 | 71.50 | 72.50 | | |
| J | 3.130 | 3.169 | 79.50 | 80.50 | | |
| K | 0.2 | 256 | 6.50 | | Ф | |
| L | 3.681 | 3.720 | 93.50 | 94.50 | | |
| М | 2.028 | 2.067 | 51.50 | 52.50 | | |
| N | 0.453 | 0.492 | 11.50 | 12.50 | | |



Maximum Ratings

| Symbol | Conditions | Values | Units |
|------------------|---------------------------------|-------------|------------------------|
| ID | Three phase, full wave Tc=100°C | 200 | Α |
| IFSM | t=10mS Tvj =45℃ | 2240 | А |
| 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 | $^{\circ}\!\mathbb{C}$ |
| Tstg | | -40 to +125 | $^{\circ}\!\mathbb{C}$ |
| Mt | To terminals(M6) | 5±15% | Nm |
| Ms | To heatsink(M6) | 5±15% | Nm |
| Weight | Module (Approximately) | 230 | 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 | Conditions | | Values | ; | Units |
|--------|---|------|--------|----------|----------|
| Symbol | Conditions | Min. | Тур. | Max. | Units |
| VFM | T=25℃ IF =300A | _ | 1.45 | 1.70 | V |
| IRD | Tvj=25°C VRD=VRRM Tvj=150°C VRD=VRRM | _ | _ | 0.5 6 | mA mA |



Performance Curves

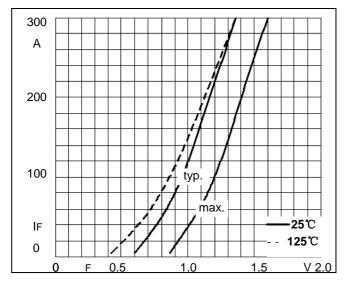


Fig1. Forward Characteristics

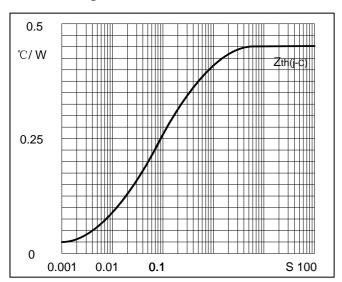


Fig3. Transient thermal impedance

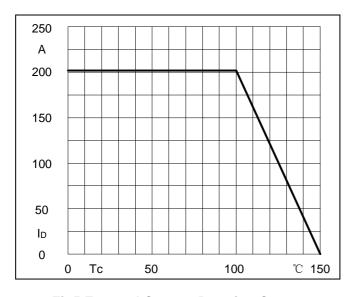


Fig5.Forward Current Derating Curve

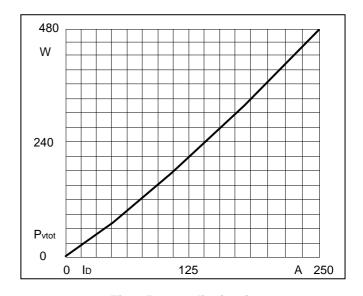


Fig2. Power dissipation

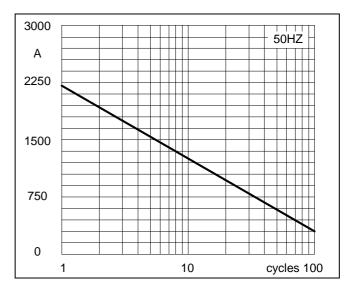


Fig4. Max Non-Repetitive Forward Surge Current



Ordering Information

| Device | Packing |
|----------------|--------------------------|
| Part Number-BP | Bulk: 6PCS/BOX;60PCS/CTN |

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