

## **Features**

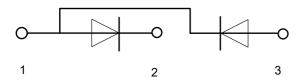
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Heat Transfer Through Aluminum Oxide DBC Ceramic Isolated Metal Baseplate
- Blocking voltage:1200 to 1800V

# **Applications**

- Non-Controllable Rectifiers for AC/AC Converters
- Line Rectifiers for Transistorized AC Motor Controllers
- Field Supply for DC Motors

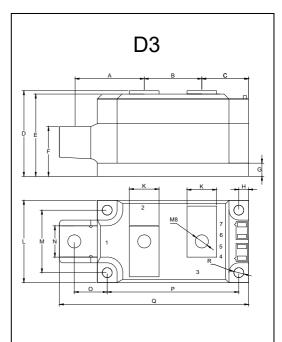
| MCC Part Number | $V_{RRM}$ | $V_{RSM}$ |
|-----------------|-----------|-----------|
| MD260C12D3      | 1200V     | 1400V     |
| MD260C14D3      | 1400V     | 1600V     |
| MD260C16D3      | 1600V     | 1800V     |
| MD260C18D3      | 1800V     | 2000V     |





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

# 260 Amp DIODE MODULES 1200 to 1800 Volts



| DIMENSIONS |        |       |        |        |      |
|------------|--------|-------|--------|--------|------|
|            | INCHES |       | ММ     |        |      |
| DIM        | MIN    | MAX   | MIN    | MAX    | NOTE |
| Α          | 1.654  | 1.693 | 42.00  | 43.00  |      |
| В          | 1.358  | 1.398 | 34.50  | 35.50  |      |
| С          | 1.102  | 1.142 | 28.00  | 29.00  |      |
| D          | 2.028  | 2.067 | 51.50  | 52.50  |      |
| Е          | 1.909  | 1.988 | 48.50  | 50.50  |      |
| F          | 1.240  | 1.280 | 31.50  | 32.50  |      |
| G          | 0.295  | 0.335 | 7.50   | 8.50   |      |
| Н          | 0.217  | 0.256 | 5.50   | 6.50   |      |
| K          | 0.689  | 0.728 | 17.50  | 18.50  |      |
| L          | 1.791  | 1.988 | 45.50  | 50.50  |      |
| М          | 1.476  | 1.516 | 37.50  | 38.50  |      |
| N          | 0.728  | 0.768 | 18.50  | 19.50  |      |
| 0          | 0.768  | 0.807 | 19.50  | 20.50  |      |
| Р          | 3.130  | 3.169 | 79.50  | 80.50  |      |
| Q          | 4.508  | 4.547 | 114.50 | 115.50 |      |
| R          | 0.236  | 0.276 | 6.00   | 7.00   | Ø    |



# **Maximum Ratings**

| Symbol           | Conditions                                     | Values     | Units            |
|------------------|--|------------|------------------|
| lfav             | Single phase ,half wave 180° conduction Tc=95℃ | 260        | Α                |
| IFSM             | t=10mS Tvj =45℃                                | 8500       | Α                |
| i <sup>2</sup> t | t=10mS Tvj =45℃                                | 361000     | A <sup>2</sup> s |
| Visol            | a.c.50HZ;r.m.s.;1min                           | 2500       | V                |
| Tvj              |  | -40 to 150 | $^{\circ}$       |
| Tstg             |  | -40 to 125 | $^{\circ}$       |
| Mt               | To terminals(M6)                               | 12±15%     | Nm               |
| Ms               | To heatsink(M6)                                | 6±15%      | Nm               |
| Weight           | Module (Approximately)                         | 650        | g                |

# **Thermal Characteristics**

| Symbol   | Conditions | Values | Units |
|----------|------------|--------|-------|
| Rth(j-c) | Per diode  | 0.14   | °C/W  |
| Rth(c-s) | Module     | 0.04   | °C/W  |

# **Electrical Characteristics**

| Symbol   | Symbol Conditions |      | Values | 3    | Units  |
|----------|-------------------|------|--------|------|--------|
| Syllibol | Conditions        | Min. | Тур.   | Max. | Oilits |
| VFM      | T=25℃ IF =300A    | _    | _      | 1.45 | V      |
| IRD      | Tvj=150℃ VRD=VRRM | _    | _      | 9    | mA     |

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## **Performance Curves**

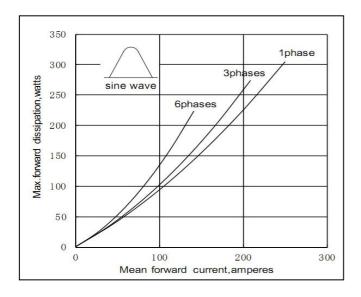


Fig1. Power dissipation

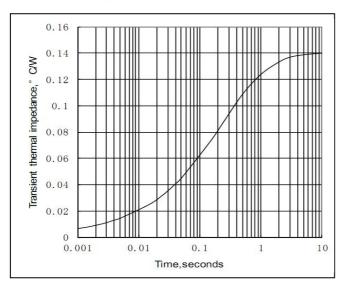


Fig3. Transient thermal impedance

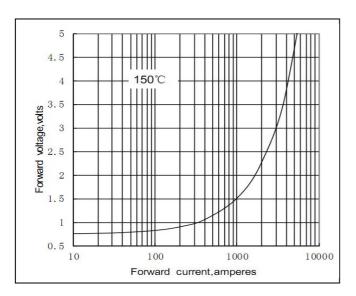


Fig5. Forward Characteristics

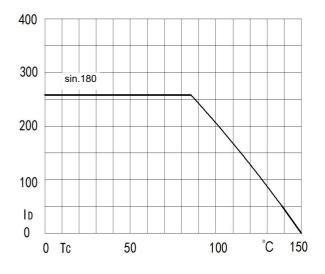


Fig2.Forward Current Derating Curve

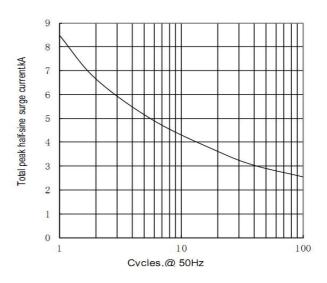


Fig4. Max Non-Repetitive Forward Surge Current



## **Ordering Information**

| Device         | Packing                   |
|----------------|---------------------------|
| Part Number-BP | Bulk: 3PCS/BOX ;18PCS/CTN |

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