

# DIODE MODULE 400A / 800V

## PC4008, PD4008

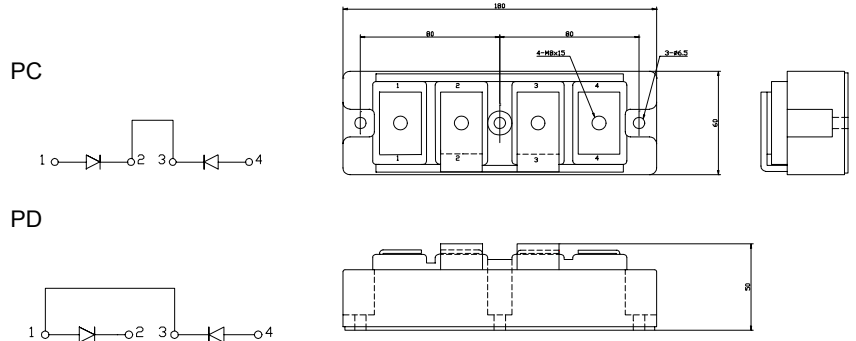
### FEATURES

- \* Isolated Base
- \* Dual Diodes Cathode Common and Cascaded Circuit
- \* High Surge Capability
- \* UL Recognized, File No. E187184

### TYPICAL APPLICATIONS

- \* Rectified For General Use

### OUTLINE DRAWING



### Maximum Ratings

Approx Net Weight:1300g

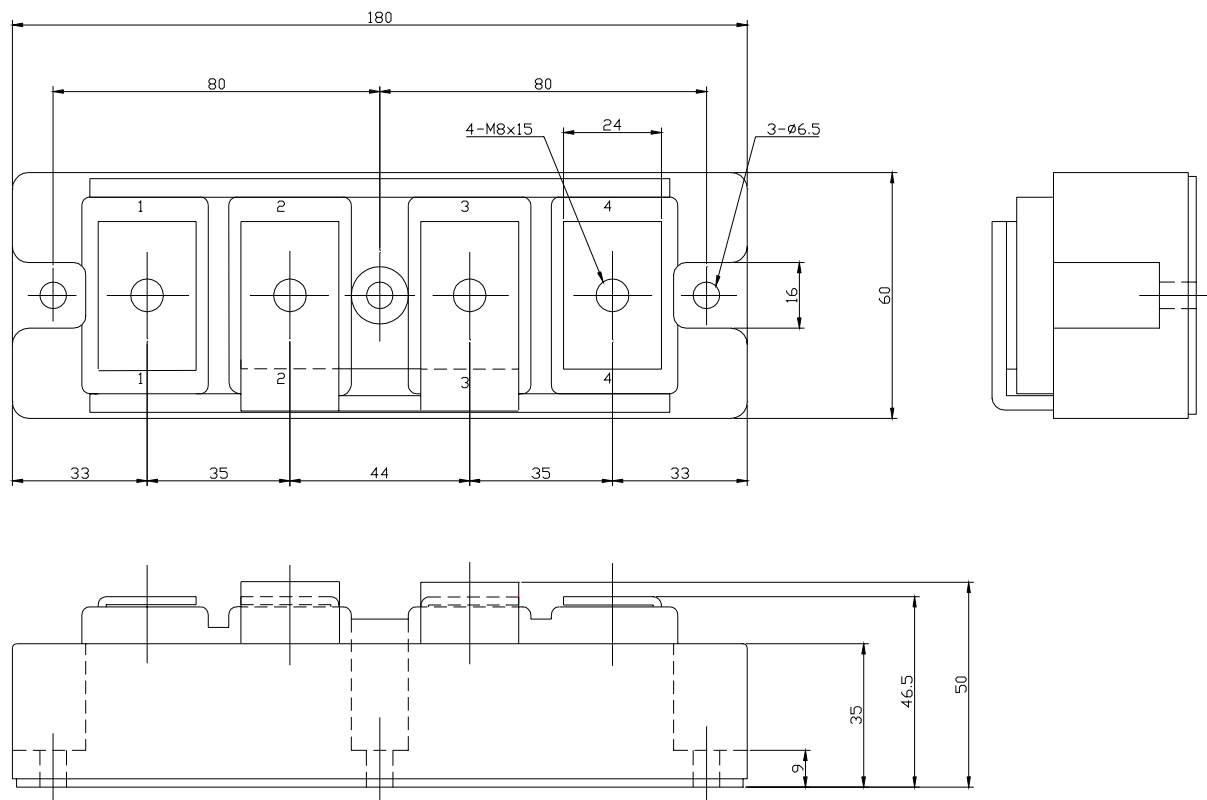
| Parameter                           | Symbol    | Type / Grade | Unit |
|-------------------------------------|-----------|--------------|------|
|                                     |           | PC/D4008     |      |
| Repetitive Peak Reverse Voltage     | $V_{RRM}$ | 800          | V    |
| Non Repetitive Peak Reverse Voltage | $V_{RSM}$ | 960          |      |

| Parameter                            |               | Conditions                                                | Max Rated Value | Unit                 |
|--------------------------------------|---------------|-----------------------------------------------------------|-----------------|----------------------|
| Average Rectified Output Current     |               | 50Hz Half Sine Wave condition<br>$T_c=94^{\circ}\text{C}$ | 400             | A                    |
| RMS Forward Current                  |               |                                                           | 630             | A                    |
| Surge Forward Current                |               | 50 Hz Half Sine Wave, 1Pulse<br>Non-repetitive            | 8000            | A                    |
| I Squared t                          |               | 2msec to 10msec                                           | 320000          | $\text{A}^2\text{s}$ |
| Operating Junction Temperature Range |               |                                                           | -40 to +150     | $^{\circ}\text{C}$   |
| Storage Temperature Range            |               |                                                           | -40 to +125     | $^{\circ}\text{C}$   |
| Isolation Voltage                    |               | Base Plate to Terminals, AC1min                           | 2000            | V                    |
| Mounting torque                      | Case mounting | Ftor                                                      | M6 Screw        | 2.5 to 3.5           |
|                                      | Terminals     |                                                           | M8 Screw        | 9.0 to 10.0          |

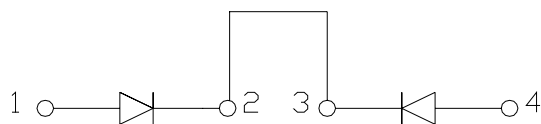
### Electrical • Thermal Characteristics

| Characteristics      | Symbol        | Test Conditions                                   | Max. | Unit                 |
|----------------------|---------------|---------------------------------------------------|------|----------------------|
| Peak Reverse Current | $I_{RM}$      | $V_{RM}= V_{RRM}$ , $T_j= 150^{\circ}\text{C}$    | 30   | mA                   |
| Peak Forward Voltage | $V_{FM}$      | $I_{FM}= 1300\text{A}$ , $T_j=25^{\circ}\text{C}$ | 1.25 | V                    |
| Thermal Resistance   | $R_{th(j-c)}$ | Junction to Case                                  | 0.12 | $^{\circ}\text{C/W}$ |
|                      | $R_{th(c-f)}$ | Base Plate to Heat Sink with Thermal Compound     | 0.05 |                      |

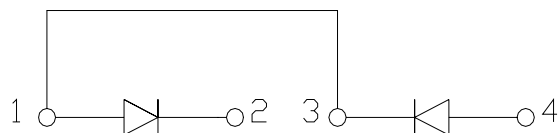
PC/D4008 OUTLINE DRAWING (Dimensions in mm)



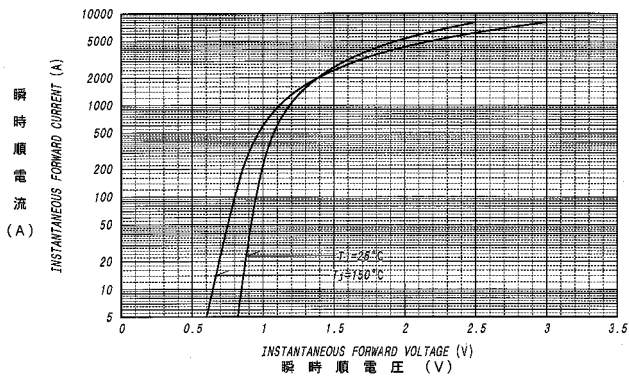
PC



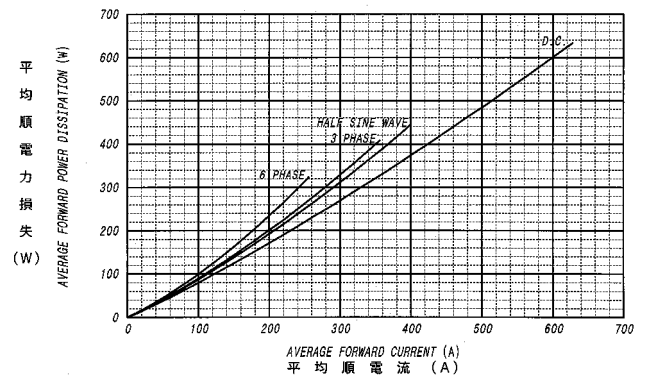
PD



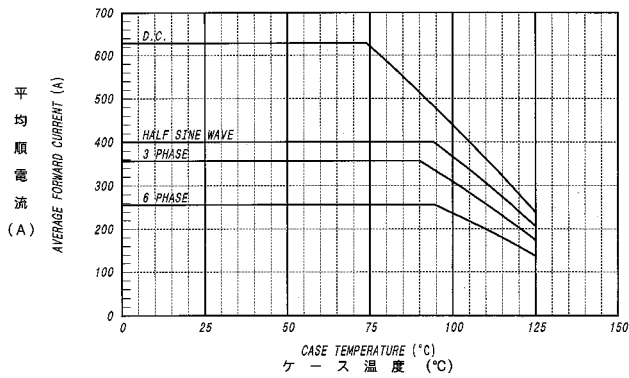
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION

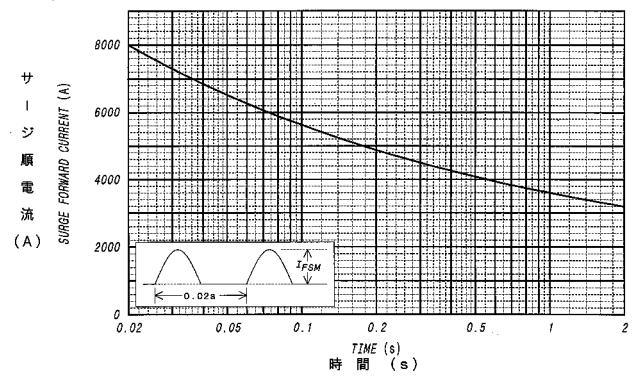


平均順電流 - ケース温度定格  
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格  
SURGE CURRENT RATINGS

$f=50\text{Hz}$ , Half Sine Wave, Non-Repetitive,  $T_j=150^\circ\text{C}$



過渡熱抵抗特性  
MAXIMUM TRANSIENT THERMAL IMPEDANCE  
Junction to Case

