

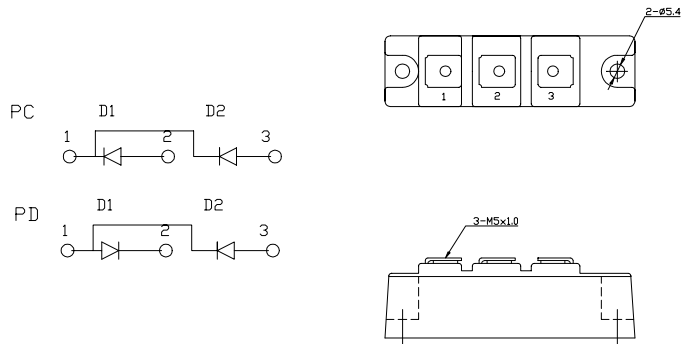
# DIODE MODULE 100A/800V

**PC1008**
**PD1008**
**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:155g

| Parameter                              | Symbol    | Type / Grade    | Unit |
|--|-----------|-----------------|------|
|  |           | PC1008 / PD1008 |      |
| Repetitive Peak Reverse Voltage *1     | $V_{RRM}$ | 800             | V    |
| Non Repetitive Peak Reverse Voltage *1 | $V_{RSM}$ | 960             |      |

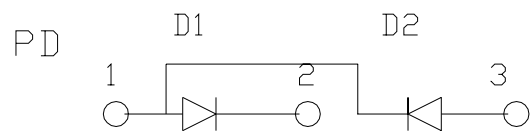
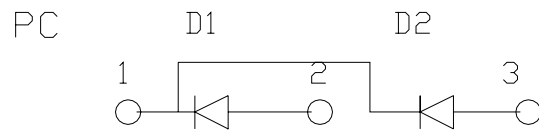
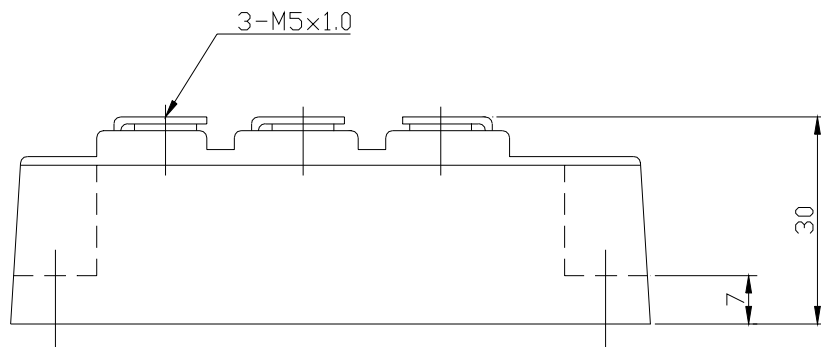
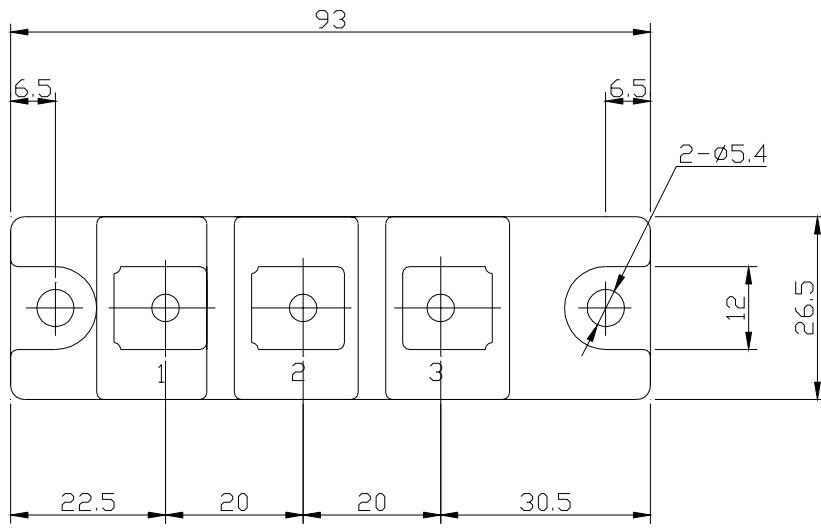
| Parameter                            | Symbol        | Conditions   | Max Rated Value | Unit                 |
|--------------------------------------|---------------|--|-----------------|----------------------|
| Average Rectified Output Current *1  | $I_{O(AV)}$   | 50Hz Half Sine Wave condition<br>$T_c=105^\circ\text{C}$ | 100             | A                    |
| RMS Forward Current *1               | $I_{F(RMS)}$  |  | 156             | A                    |
| Surge Forward Current *1             | $I_{FSM}$     | 50 Hz Half Sine Wave, 1Pulse<br>Non-repetitive           | 2000            | A                    |
| I Squared t *1                       | $I^2t$        | 2msec to 10msec  | 20000           | $\text{A}^2\text{s}$ |
| Operating Junction Temperature Range | $T_{jw}$      |  | -40 to +150     | $^\circ\text{C}$     |
| Storage Temperature Range            | $T_{stg}$     |  | -40 to +125     | $^\circ\text{C}$     |
| Isolation Voltage                    | $V_{iso}$     | Base Plate to Terminals, AC1min                          | 2000            | V                    |
| Mounting torque                      | Case mounting | $F_{tor}$  | M5 Screw        | N.m                  |
|                                      | Terminals     |  | M5 Screw        |                      |

**Electrical • Thermal Characteristics**

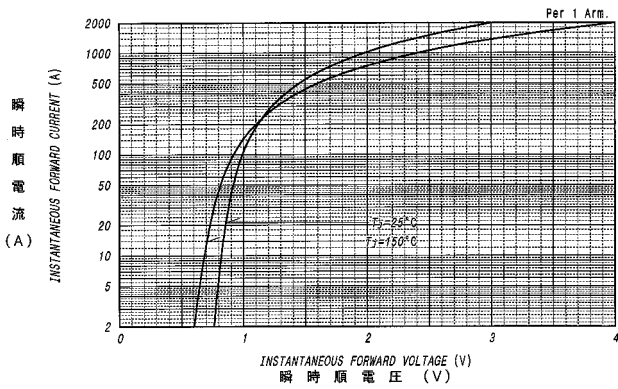
| Characteristics         | Symbol        | Test Conditions                                | Max. | Unit               |
|-------------------------|---------------|--|------|--------------------|
| Peak Reverse Current *1 | $I_{RM}$      | $V_{RM}= V_{RRM}$ , $T_j= 150^\circ\text{C}$   | 20   | mA                 |
| Peak Forward Voltage *1 | $V_{FM}$      | $I_{FM}= 320\text{A}$ , $T_j=25^\circ\text{C}$ | 1.25 | V                  |
| Thermal Resistance *1   | $R_{th(j-c)}$ | Junction to Case                               | 0.3  | $^\circ\text{C/W}$ |
|                         | $R_{th(c-f)}$ | Base Plate to Heat Sink with Thermal Compound  | 0.2  |                    |

\*1: Value Per 1Arm

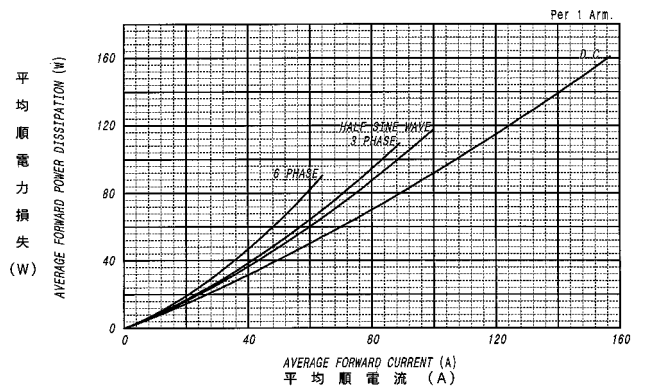
PC/PD1008 OUTLINE DRAWING (Dimensions in mm)



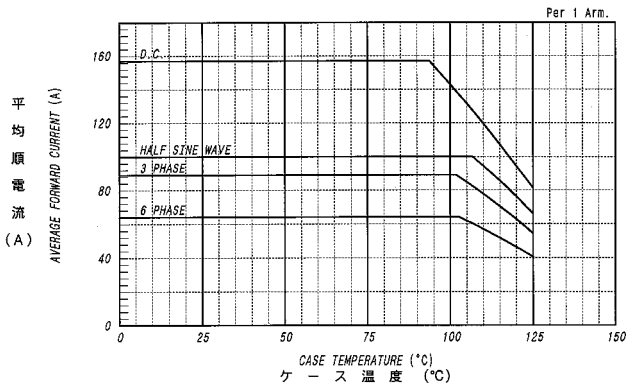
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



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

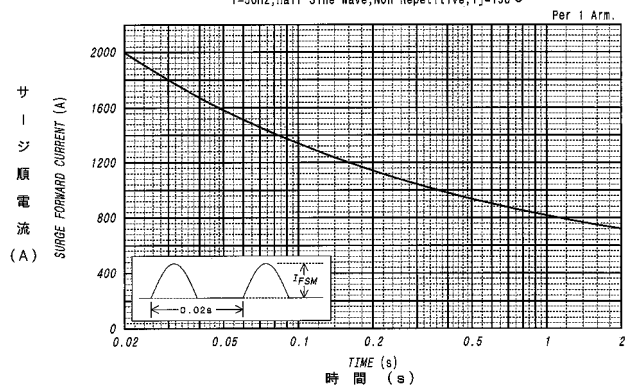


平均順電流 - ケース温度定格  
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格  
SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, Tj=150°C



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

