

DIODE MODULE 100A/1200V/1600V PT10112 PT10116

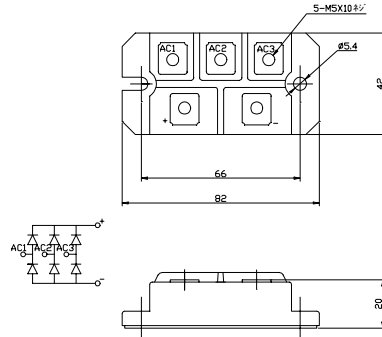
FEATURES

- * Isolated Base
- * 3 Phase Bridge Circuit
- * High Surge Capability
- * UL Recognized, File No. E187184

TYPICAL APPLICATIONS

- * Rectified For General Use

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:180g

| Parameter | Symbol | Type / Grade | | Unit |
|--|-----------|--------------|---------|------|
| | | PT10112 | PT10116 | |
| Repetitive Peak Reverse Voltage *1 | V_{RRM} | 1200 | 1600 | V |
| Non Repetitive Peak Reverse Voltage *1 | V_{RSM} | 1300 | 1700 | |

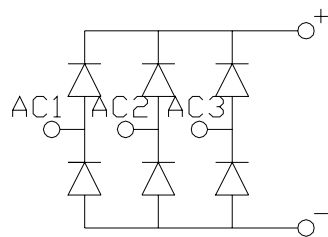
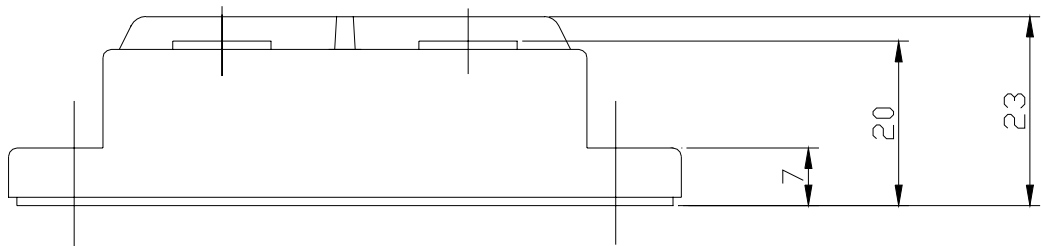
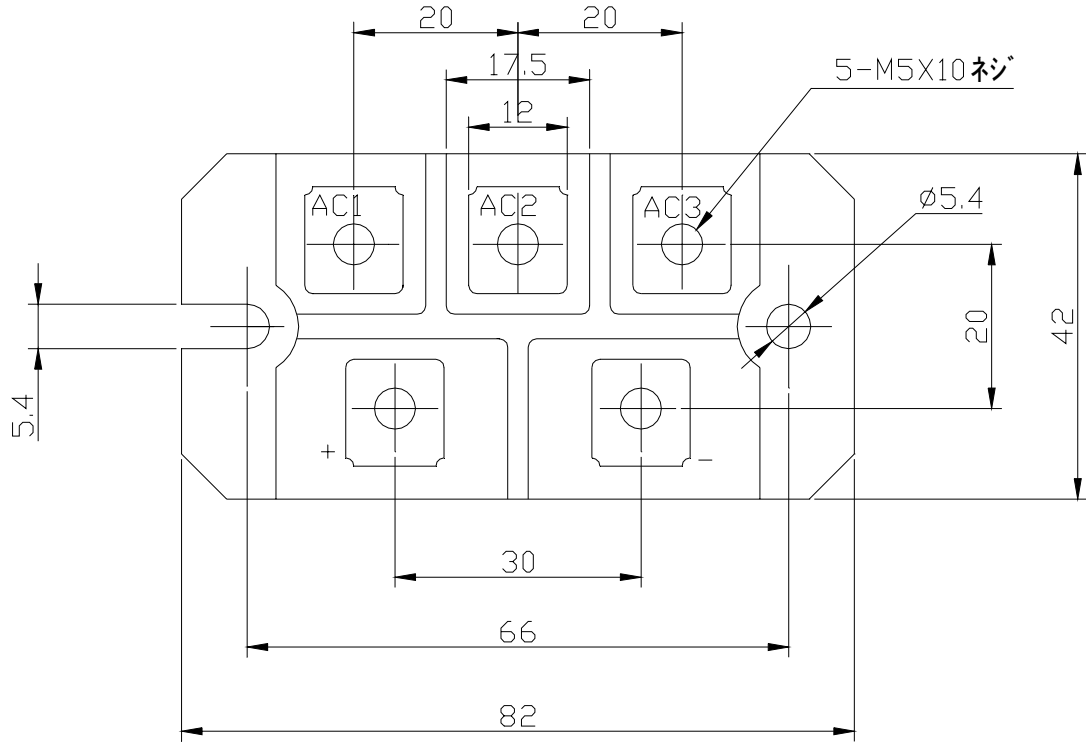
| Parameter | | Conditions | Max Rated Value | Unit | |
|--------------------------------------|---------------|---|-----------------|----------------------|-----|
| Average Rectified Output Current | $I_{O(AV)}$ | 3-Phase Full Wave Rectified $T_c=70^\circ\text{C}$ | 100 | A | |
| Surge Forward Current *1 | I_{FSM} | 50 Hz Half Sine Wave, 1Pulse Non-repetitive | 1200 | A | |
| I Squared t *1 | I^2t | 2msec to 10msec | 7200 | A^2s | |
| Operating Junction Temperature Range | T_{jw} | | -40 to +125 | $^\circ\text{C}$ | |
| Storage Temperature Range | T_{stg} | | -40 to +125 | $^\circ\text{C}$ | |
| Isolation Voltage | Viso | Base Plate to Terminals, AC1min | 2500 | V | |
| Mounting torque | Case mounting | Ftor | Greased | 2.4 to 2.8 | N.m |
| | Terminals | | M5 Screw | | |
| | | M5 | 2.4 to 2.8 | | |

Electrical • Thermal Characteristics

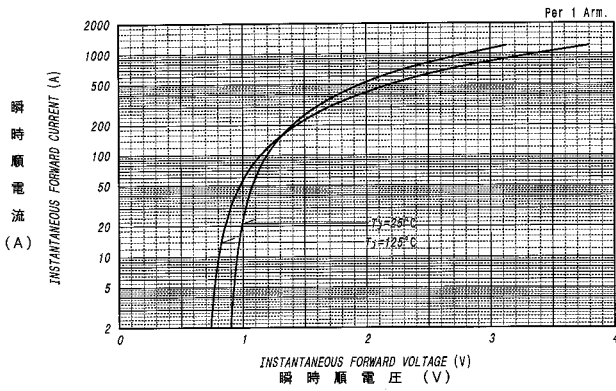
| Characteristics | Symbol | Test Conditions | Max. | Unit |
|-------------------------|---------------|---|------|--------------------|
| Peak Reverse Current *1 | I_{RM} | $V_{RM}= V_{RRM}, T_j= 125^\circ\text{C}$ | 10 | mA |
| Peak Forward Voltage *1 | V_{FM} | $I_{FM}= 100\text{A}, T_j=25^\circ\text{C}$ | 1.2 | V |
| Thermal Resistance | $R_{th(j-c)}$ | Junction to Case (Total) | 0.24 | $^\circ\text{C/W}$ |
| | $R_{th(c-f)}$ | Base Plate to Heat Sink with Thermal Compound (Total) | 0.06 | |

*1: Value Per 1Arm

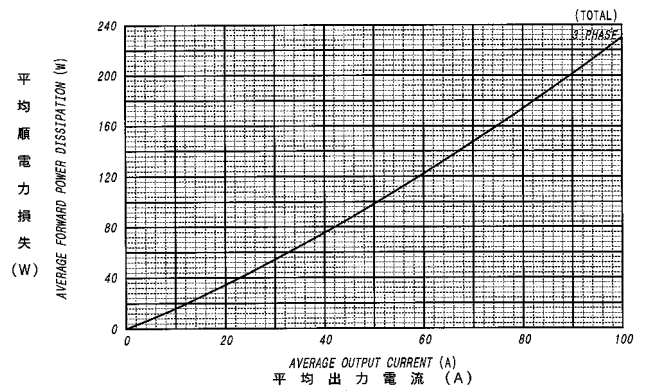
PT1011x OUTLINE DRAWING (Dimensions in mm)



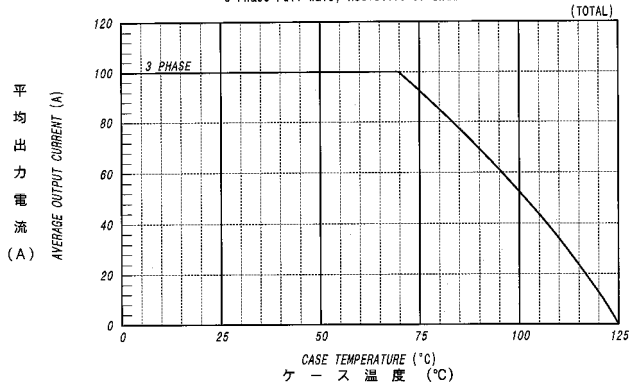
順電圧特性
FORWARD CURRENT VS. VOLTAGE



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



平均出力電流 - ケース温度定格
AVERAGE OUTPUT CURRENT VS. CASE TEMPERATURE



サージ順電流定格
SURGE CURRENT RATINGS

