

THYRISTOR MODULE

PAT1508 PAH1508

150A / 800V

FEATURES

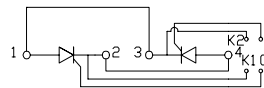
- * Isolated Base
- * Dual Thyristors or Thyristor and Diode Anti-Parallel Circuit
- * High Surge Capability
- * UL Recognized, File No. E187184

TYPICAL APPLICATIONS

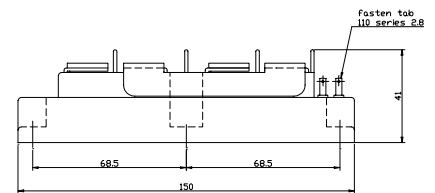
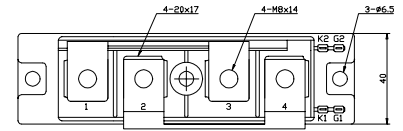
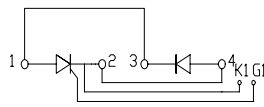
- * Rectified For General Use

OUTLINE DRAWING

PAT



PAH



Maximum Ratings

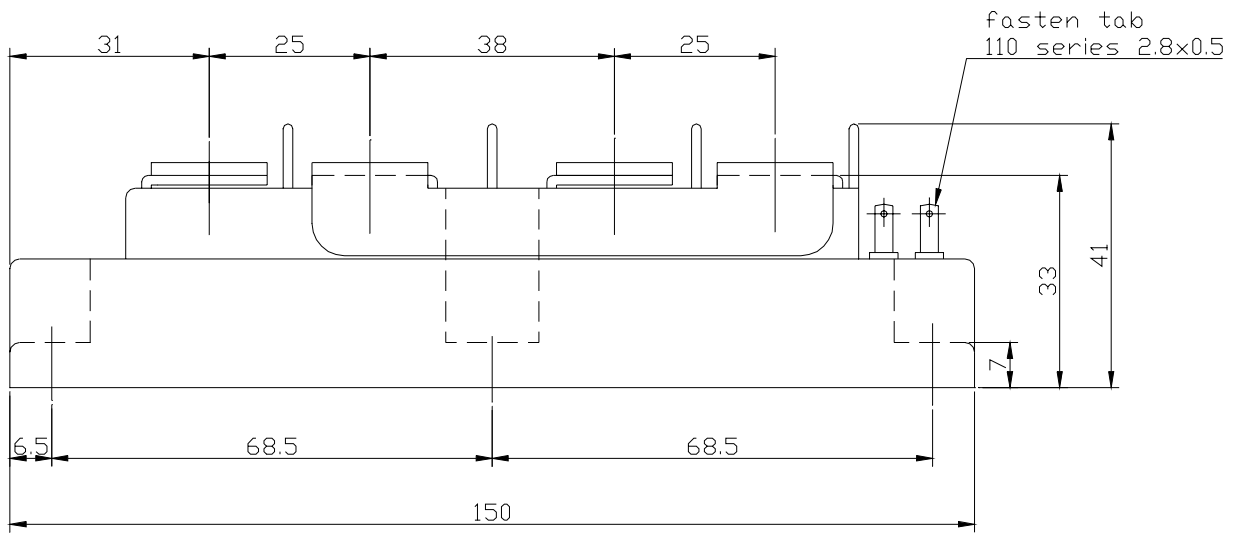
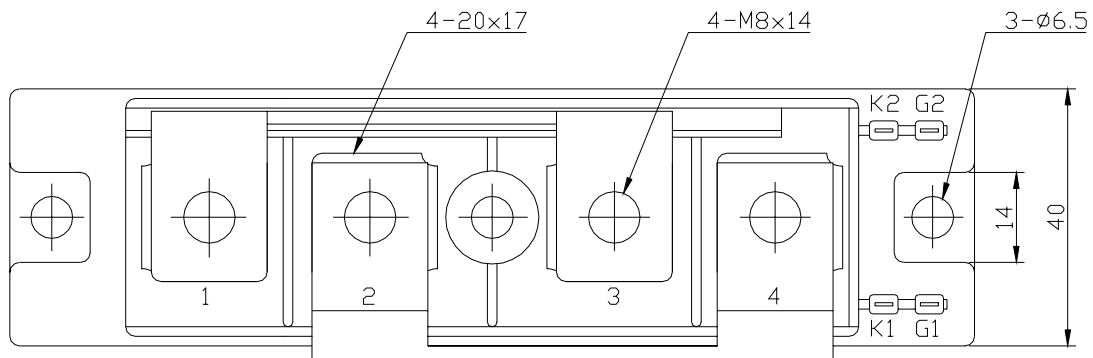
Approx Net Weight:500g

| Parameter | Symbol | Grade | Unit |
|---------------------------------------|-----------|-------------|------|
| | | PAT/PAH1508 | |
| Repetitive Peak Off-State Voltage | V_{DRM} | 800 | V |
| Non Repetitive Peak Off-State Voltage | V_{DSM} | 900 | |
| Repetitive Peak Reverse Voltage | V_{RRM} | 800 | V |
| Non Repetitive Peak Reverse Voltage | V_{RSM} | 900 | |

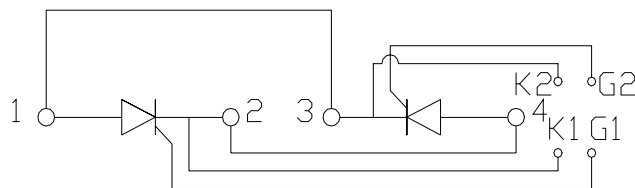
| Parameter | | Conditions | Max Rated Value | Unit |
|--------------------------------------|---------------|---|-----------------|------------|
| Average Rectified Output Current | $I_{O(AV)}$ | 50Hz Half Sine Wave condition $T_c=78^\circ C$ | 150 | A |
| RMS On-State Current | $I_{T(RMS)}$ | | 235 | A |
| Surge On-State Current | I_{TSM} | 50 Hz Half Sine Wave, 1Pulse Non-Repetitive | 3200 | A |
| I Squared t | I^2t | 2msec to 10msec | 51200 | A^2s |
| Critical Rate of Turned-On Current | di/dt | $V_D=2/3V_{DRM}$, $I_{TM}=2 \cdot I_o$, $T_j=125^\circ C$ $I_G=300mA$, $di/dt=0.2A/\mu s$ | 100 | $A/\mu s$ |
| Peak Gate Power | P_{GM} | | 5 | W |
| Average Gate Power | $P_{G(AV)}$ | | 1 | W |
| Peak Gate Current | I_{GM} | | 2 | A |
| Peak Gate Voltage | V_{GM} | | 10 | V |
| Peak Gate Reverse Voltage | V_{RGM} | | 5 | V |
| Operating Junction Temperature Range | T_{jw} | | -40 to +125 | $^\circ C$ |
| Storage Temperature Range | T_{stg} | | -40 to +125 | $^\circ C$ |
| Isolation Voltage | Viso | Base Plate to Terminals, AC1min | 2000 | V |
| Mounting torque | Case mounting | Ftor | M6 Screw | N.m |
| | Terminals | | M8 Screw | |

Value per 1 Arm

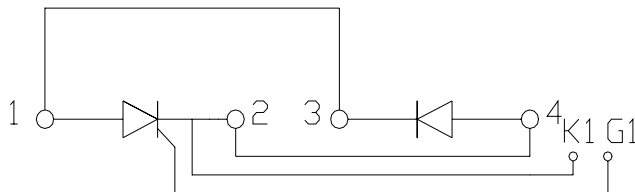
PAT/PAH1508 OUTLINE DRAWING (Dimensions in mm)



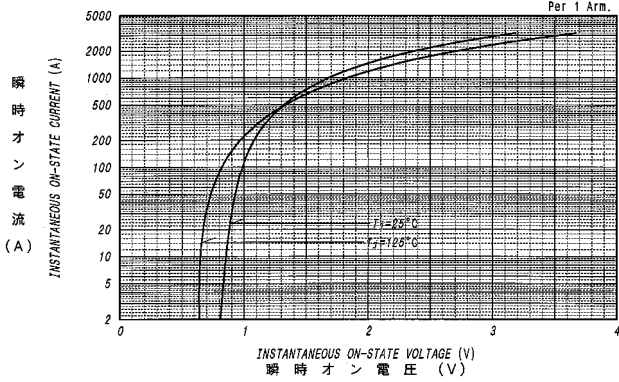
PAT



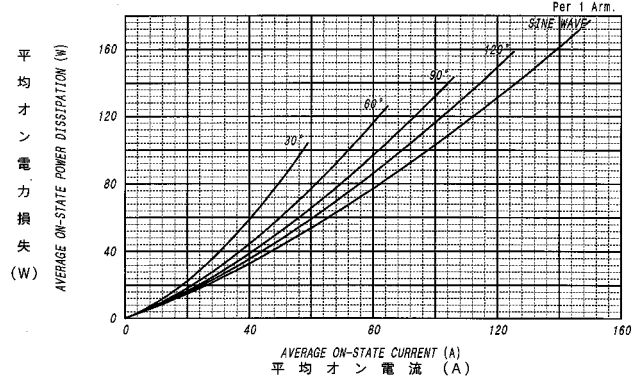
PAH



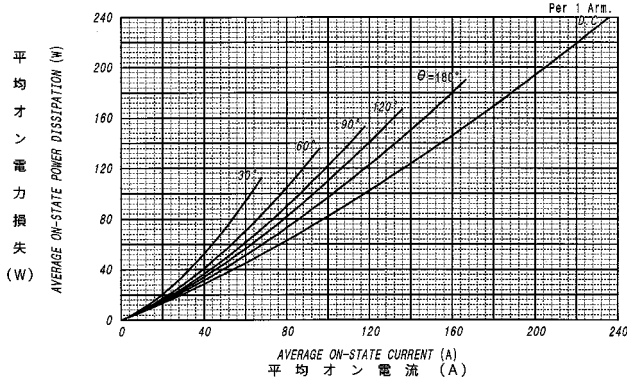
オン電圧特性
ON-STATE CURRENT VS. VOLTAGE



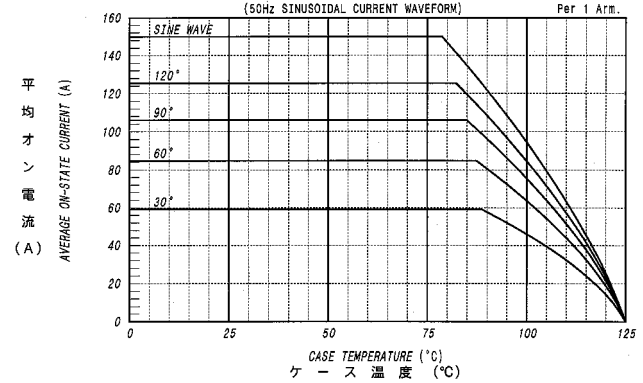
平均オン電力損失特性
AVERAGE ON-STATE POWER DISSIPATION
for SINUSOIDAL CURRENT WAVEFORM



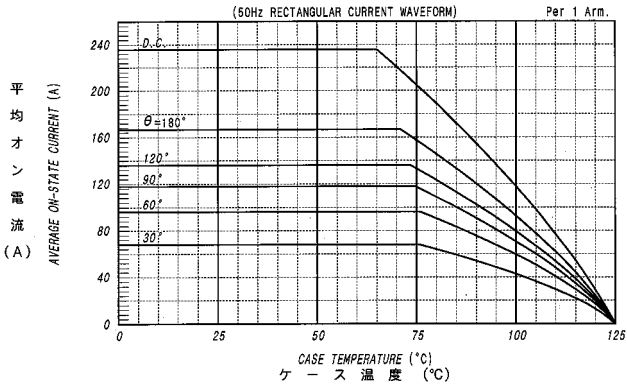
平均オン電力損失特性
AVERAGE ON-STATE POWER DISSIPATION
for RECTANGULAR CURRENT WAVEFORM



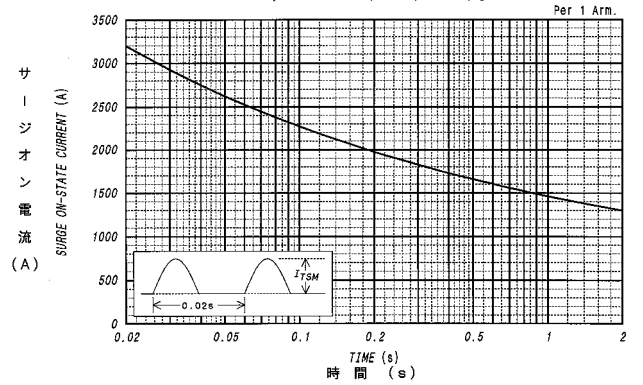
平均オン電流 - ケース温度定格
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE



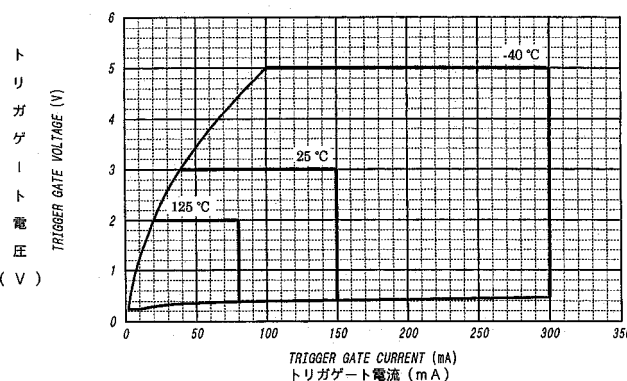
平均オン電流 - ケース温度定格
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE



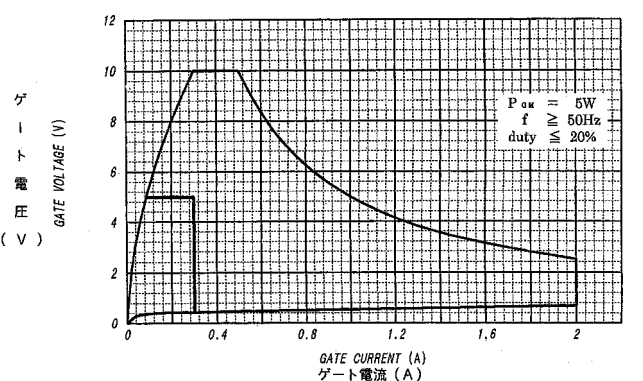
サージオン電流定格
SURGE CURRENT RATINGS



ゲート特性
GATE CHARACTERISTICS



ゲート定格
GATE RATINGS



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

