

# THYRISTOR MODULE

# PAT1508 PAH1508

## 150A / 800V

### FEATURES

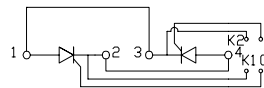
- \* Isolated Base
- \* Dual Thyristors or Thyristor and Diode Anti-Parallel Circuit
- \* High Surge Capability
- \* UL Recognized, File No. E187184

### TYPICAL APPLICATIONS

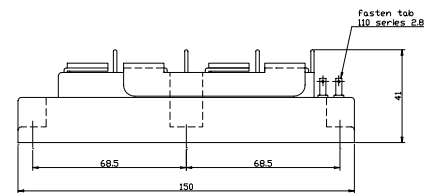
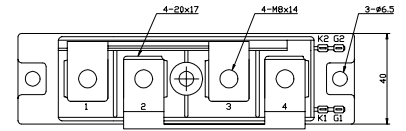
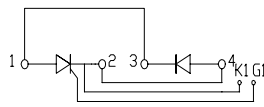
- \* Rectified For General Use

### OUTLINE DRAWING

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### Maximum Ratings

Approx Net Weight:500g

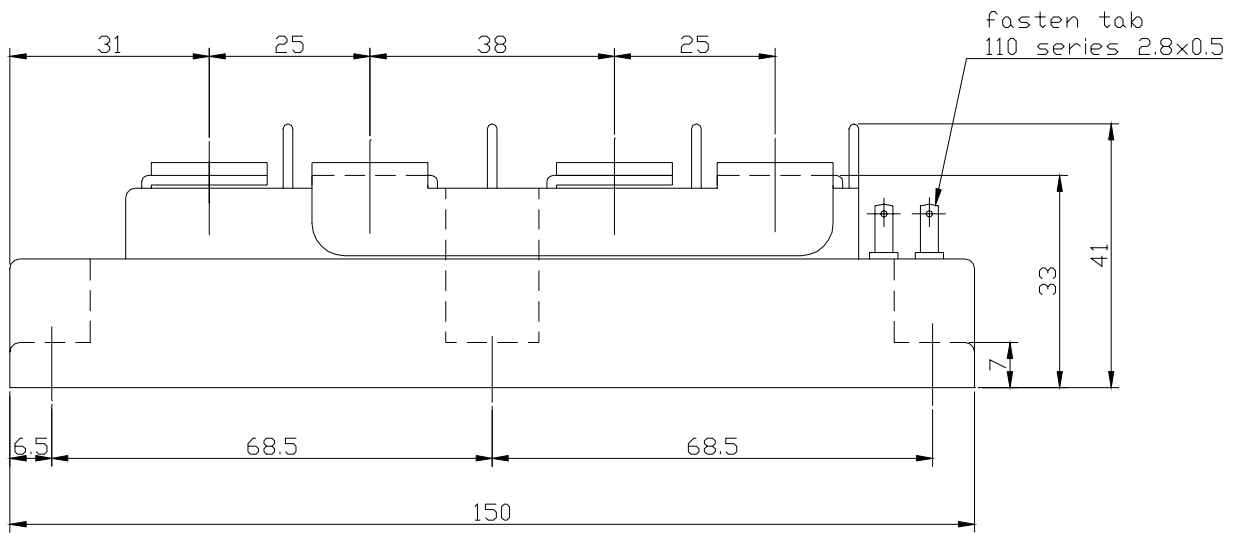
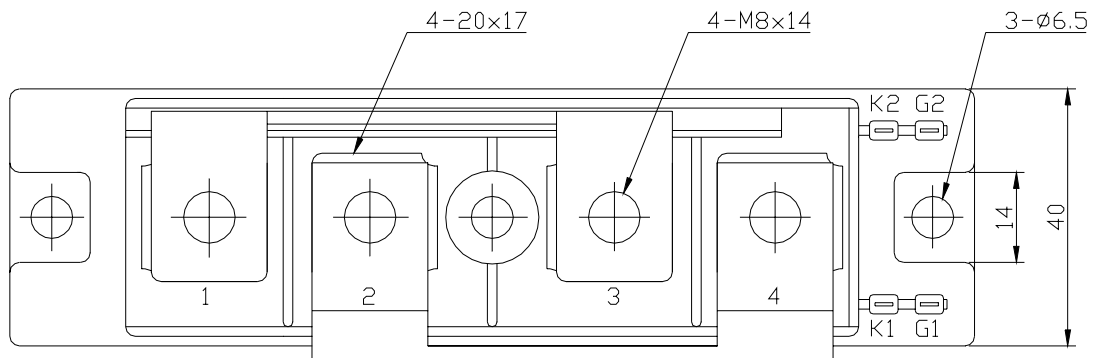
Parameter	Symbol	Grade	Unit
		PAT/PAH1508	
Repetitive Peak Off-State Voltage	$V_{DRM}$	800	V
Non Repetitive Peak Off-State Voltage	$V_{DSM}$	900	
Repetitive Peak Reverse Voltage	$V_{RRM}$	800	V
Non Repetitive Peak Reverse Voltage	$V_{RSM}$	900	

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	

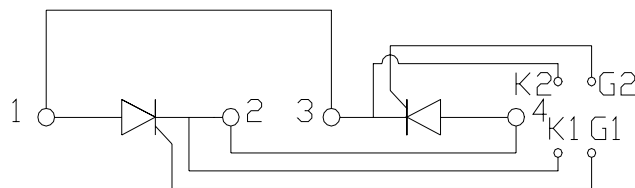
Value per 1 Arm



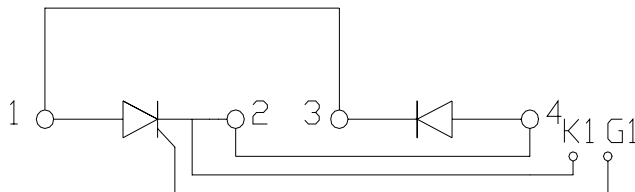
PAT/PAH1508 OUTLINE DRAWING (Dimensions in mm)



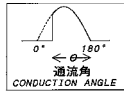
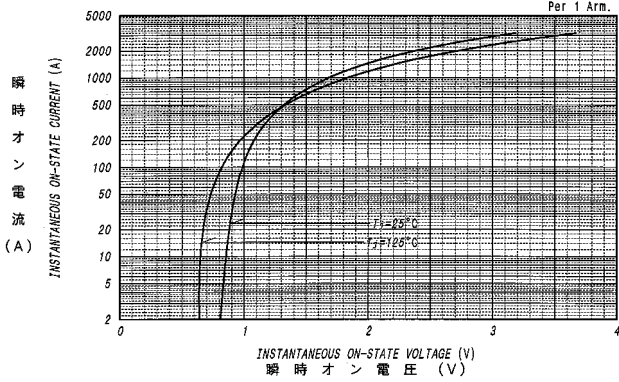
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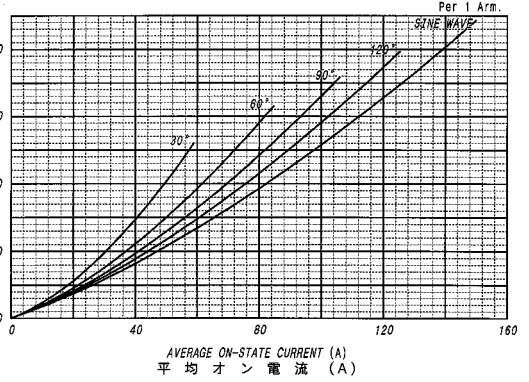


オン電圧特性  
ON-STATE CURRENT VS. VOLTAGE



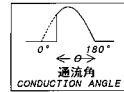
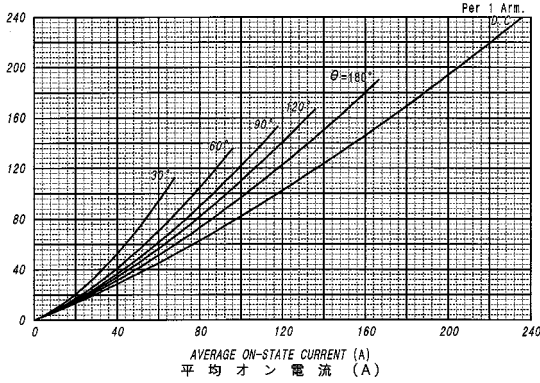
平均オン電力損失特性  
AVERAGE ON-STATE POWER DISSIPATION  
for SINUSOIDAL CURRENT WAVEFORM

平均オン電力損失 (W)



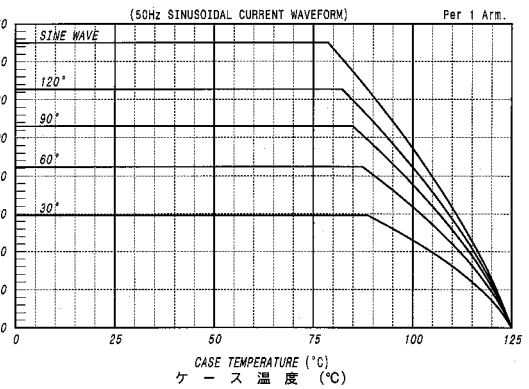
平均オン電力損失特性  
AVERAGE ON-STATE POWER DISSIPATION  
for RECTANGULAR CURRENT WAVEFORM

平均オン電力損失 (W)



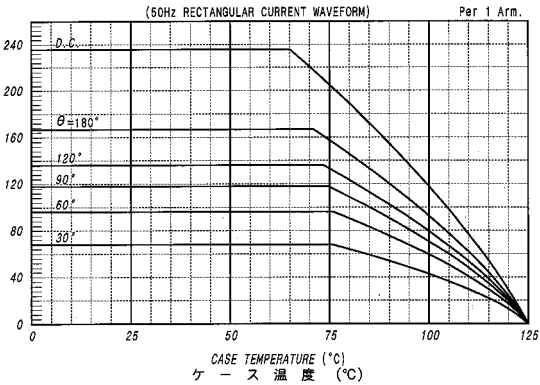
平均オン電流 - ケース温度定格  
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE

平均オン電流 (A)



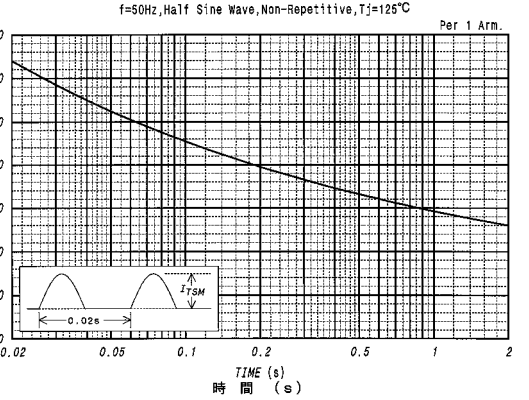
平均オン電流 - ケース温度定格  
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE

平均オン電流 (A)



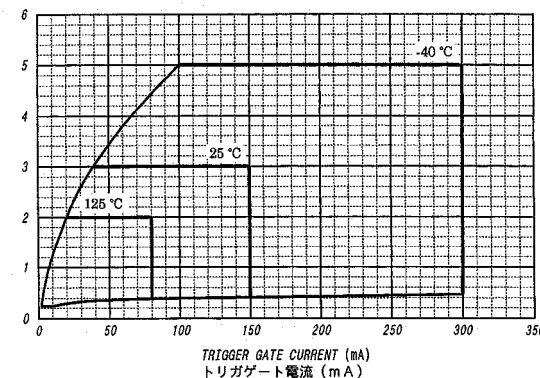
サージオン電流定格  
SURGE CURRENT RATINGS

サージオン電流 (A)



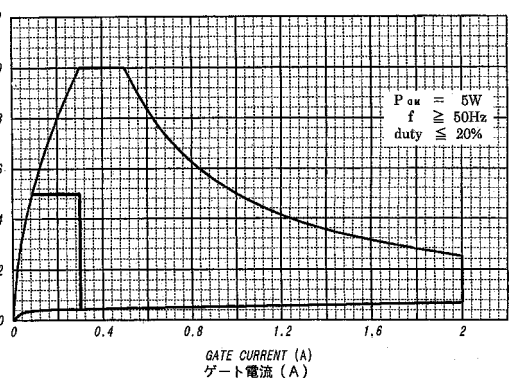
ゲート特性  
GATE CHARACTERISTICS

トリガゲート電圧 (V)



ゲート定格  
GATE RATINGS

ゲート電圧 (V)



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

