

# THYRISTOR MODULE

150A / 1200V to 1600V

PAT15012 PAT15016

PAH15012 PAH15016

## FEATURES

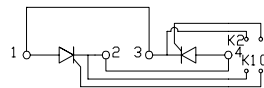
- \* Isolated Base
- \* Dual Thyristors or Thyristor and Diode Anti-Parallel Circuit
- \* High Surge Capability
- \* UL Recognized, File No. E187184

## TYPICAL APPLICATIONS

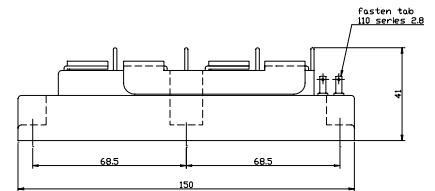
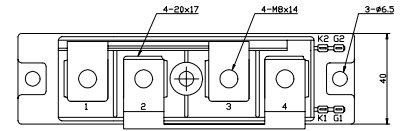
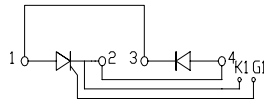
- \* Rectified For General Use

OUTLINE DRAWING

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## Maximum Ratings

Approx Net Weight:500g

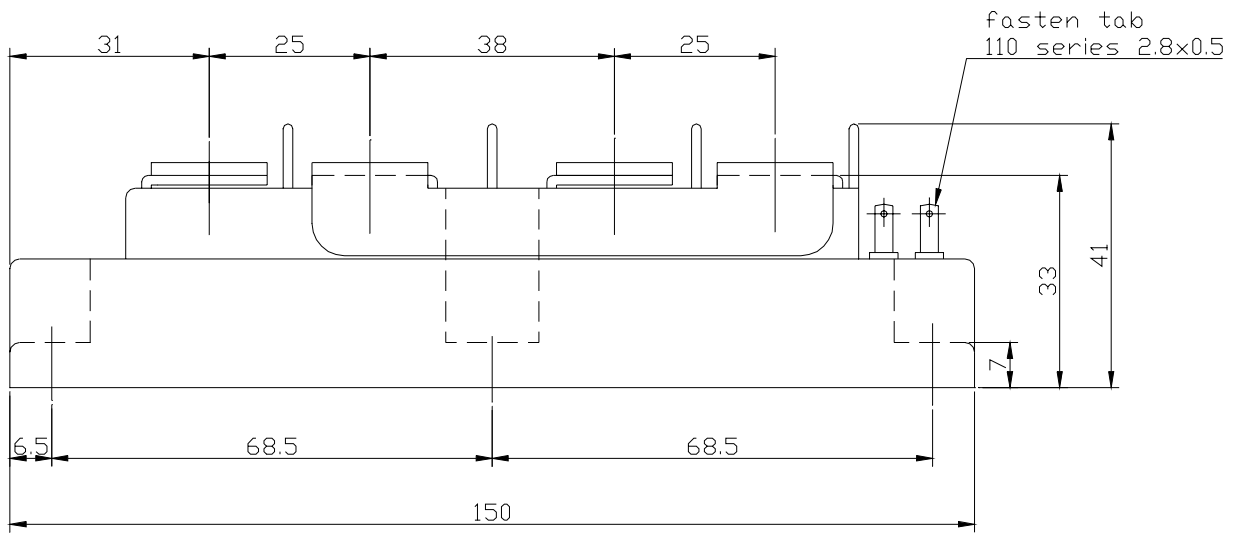
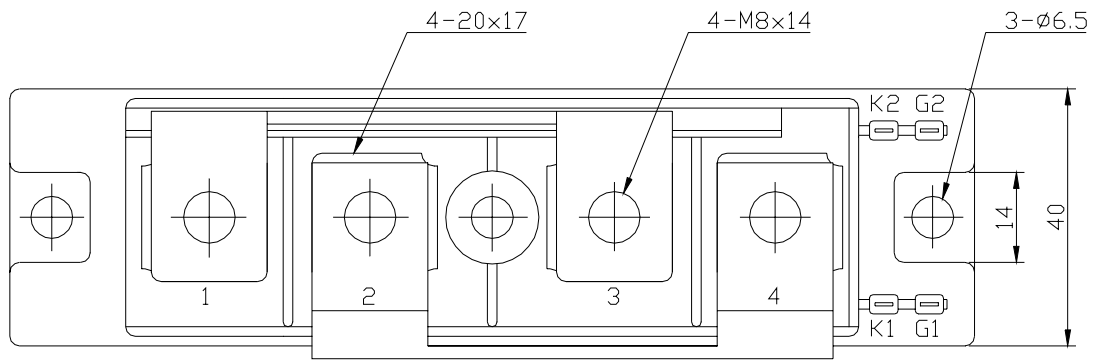
Parameter	Symbol	Grade		Unit
		PAT/PAH15012	PAT/PAH15016	
Repetitive Peak Off-State Voltage	$V_{DRM}$	1200	1600	V
Non Repetitive Peak Off-State Voltage	$V_{DSM}$	1300	1700	V
Repetitive Peak Reverse Voltage	$V_{RRM}$	1200	1600	V
Non Repetitive Peak Reverse Voltage	$V_{RSM}$	1300	1700	V

Parameter		Conditions	Max Rated Value	Unit	
Average Rectified Output Current	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=73^\circ C$	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	2500	V	
Mounting torque	Case mounting	Ftor	M6 Screw	2.5 to 3.5	N.m
	Terminals		M8 Screw	9.0 to 10.0	

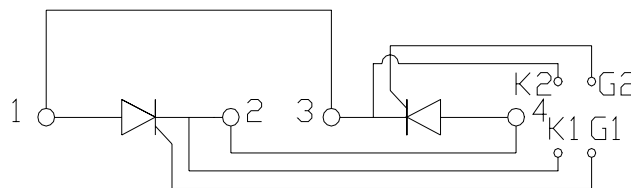
Value per 1 Arm



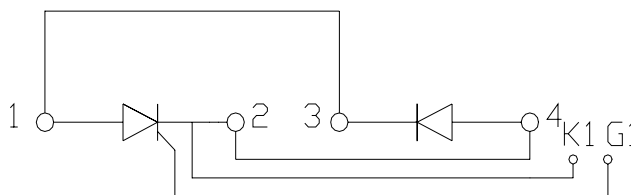
PAT/PAH1501x OUTLINE DRAWING (Dimensions in mm)



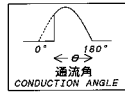
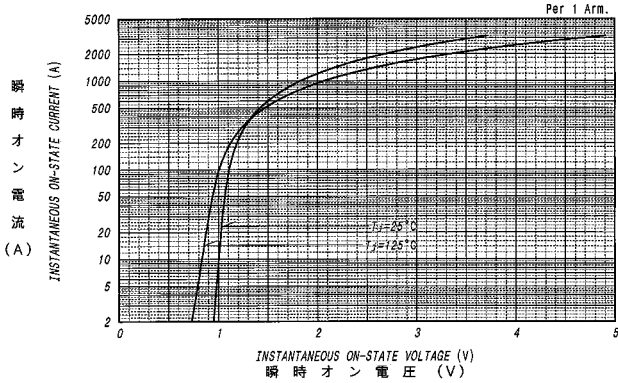
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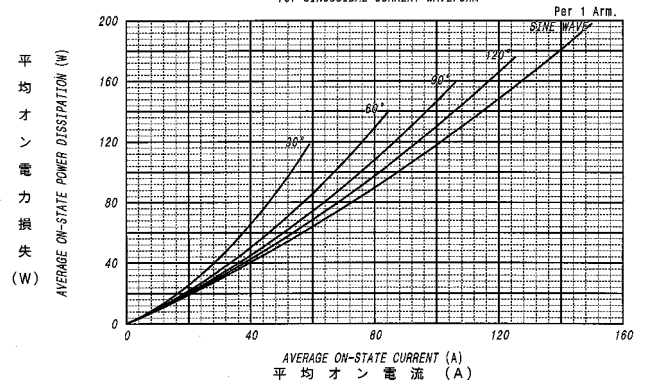
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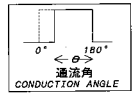
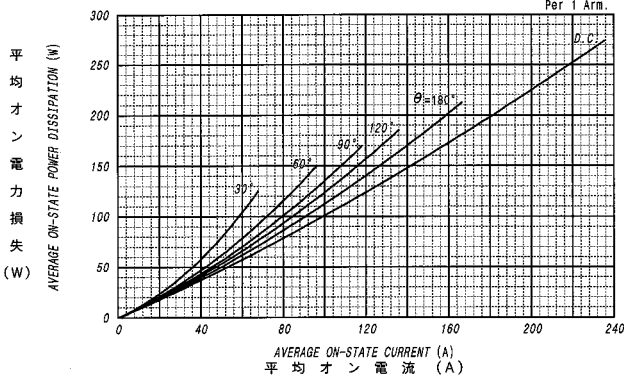
オン電圧特性  
ON-STATE CURRENT VS. VOLTAGE



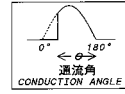
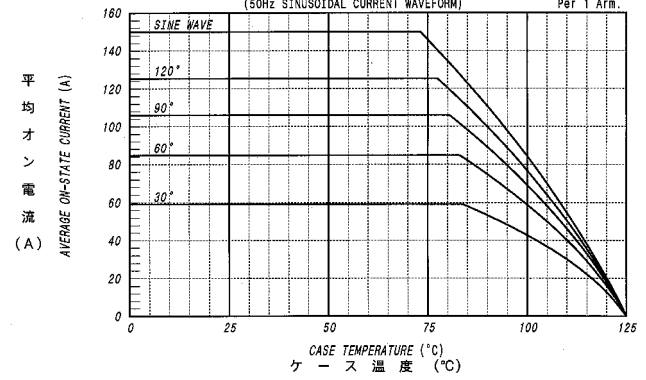
平均オン電力損失特性  
AVERAGE ON-STATE POWER DISSIPATION



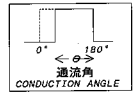
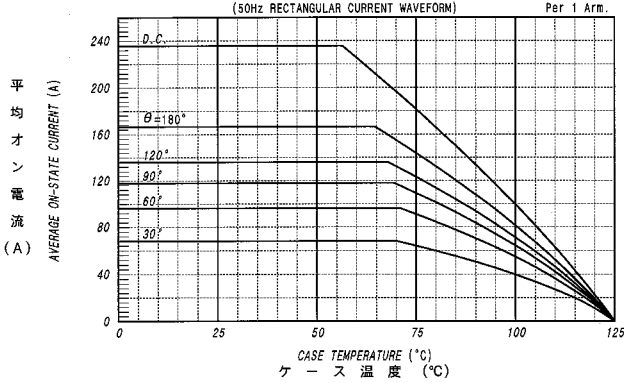
平均オン電力損失特性  
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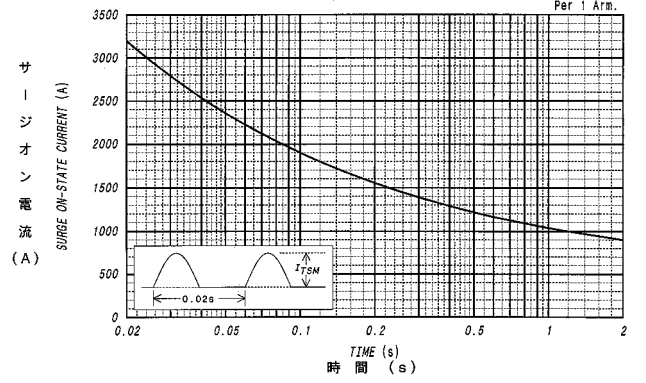
平均オン電流 - ケース温度定格  
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE



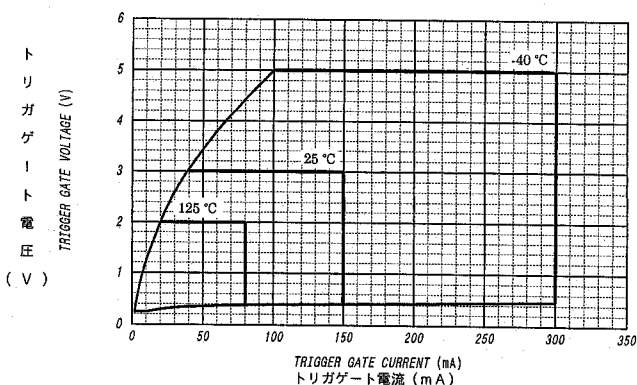
平均オン電流 - ケース温度定格  
AVERAGE ON-STATE CURRENT VS. CASE TEMPERATURE



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

