

DIODE MODULE 150A/1200V/1600V PT150S12 PT150S16

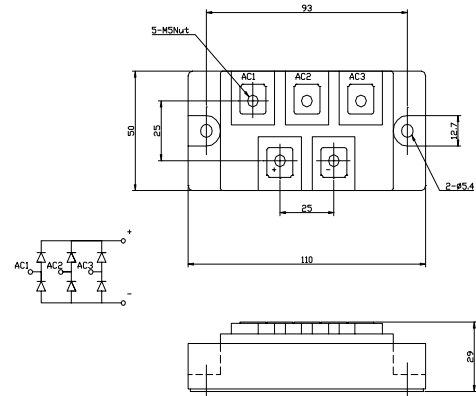
FEATURES

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

TYPICAL APPLICATIONS

- * Rectified For General Use

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:370g

Parameter	Symbol	Type / Grade		Unit
		PT150S12	PT150S16	
Repetitive Peak Reverse Voltage *1	V_{RRM}	1200	1600	V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	1300	1750	

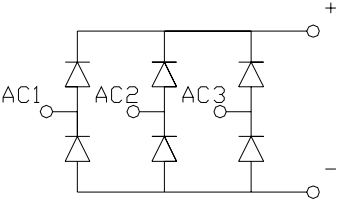
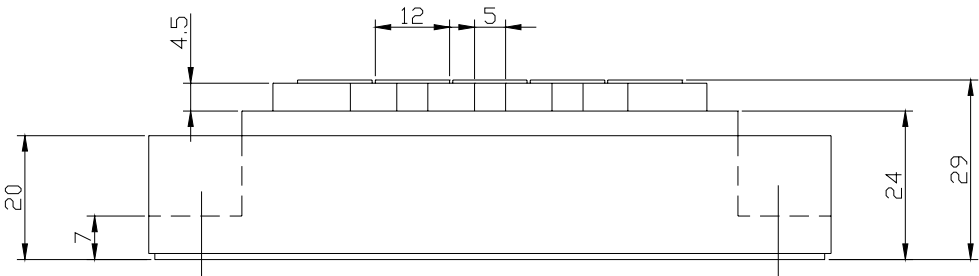
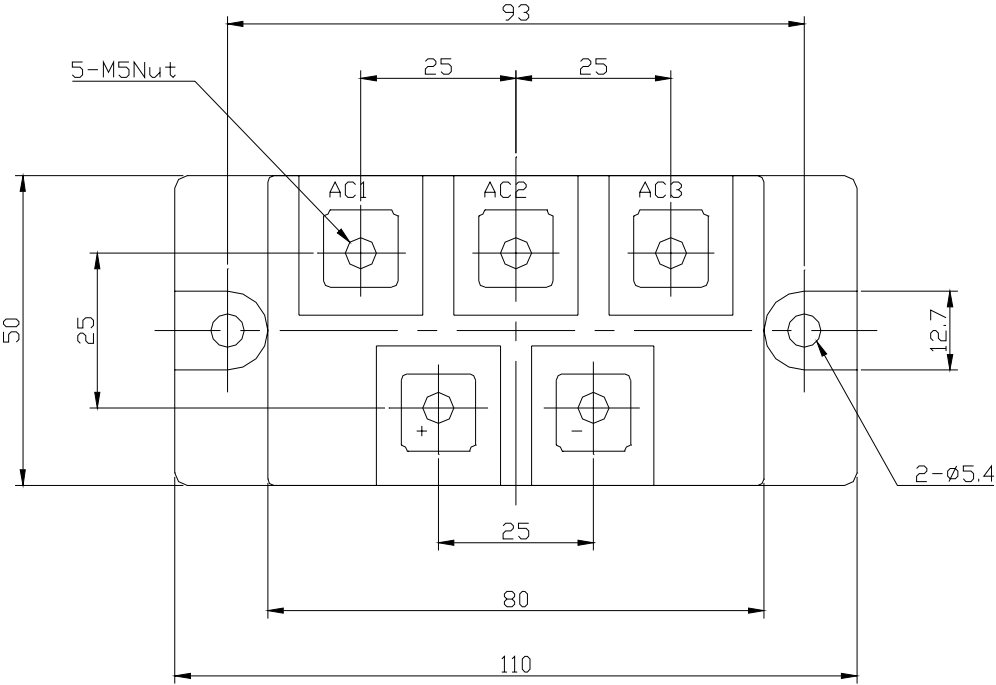
Parameter			Conditions	Max Rated Value	Unit
Average Rectified Output Current		$I_{O(AV)}$	3-Phase Full Wave Rectified $T_c = T_t(\text{Terminal}) = 70^\circ\text{C}$	150	A
Surge Forward Current *1		I_{FSM}	50 Hz Half Sine Wave, 1 Pulse Non-repetitive	1100	A
I Squared t *1		I^2t	2msec to 10msec	6000	A^2s
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

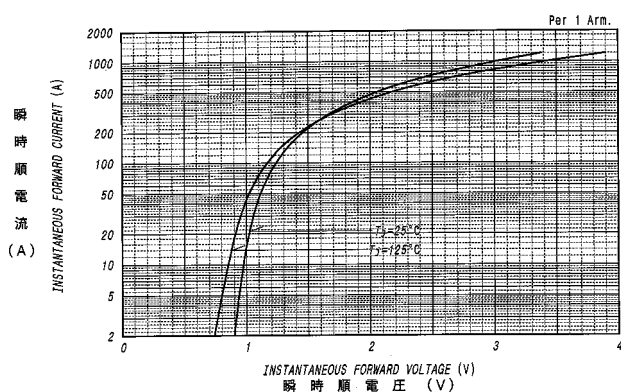
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	$V_{RM} = V_{RRM}$, $T_j = 125^\circ\text{C}$	10	mA
Peak Forward Voltage *1	V_{FM}	$I_{FM} = 150\text{A}$, $T_j = 25^\circ\text{C}$	1.35	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case (Total)	0.14	$^\circ\text{C/W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound (Total)	0.06	

*1: Value Per 1Arm

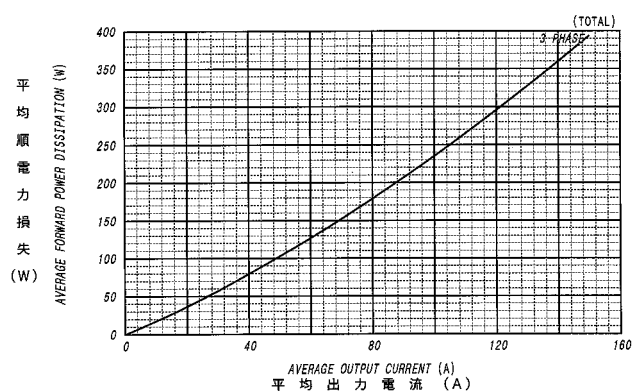
PT150Sxx OUTLINE DRAWING (Dimensions in mm)



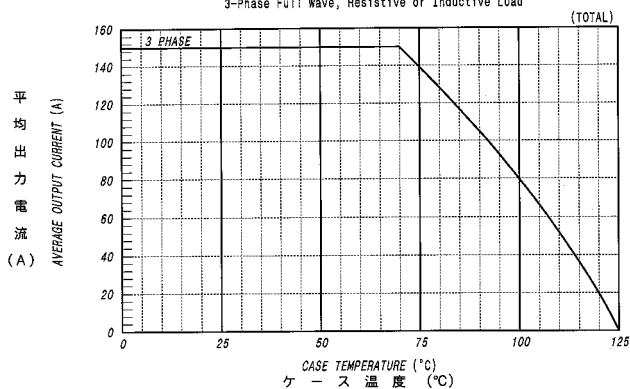
順電圧特性
FORWARD CURRENT VS. VOLTAGE



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
3-Phase Full Wave, Resistive or Inductive Load



サージ順電流定格
SURGE CURRENT RATINGS
 $f=50\text{Hz}$, Half Sine Wave, Non-Repetitive, $T_j=125^\circ\text{C}$

