

# DIODE MODULE 30A/800V

# PT30S8

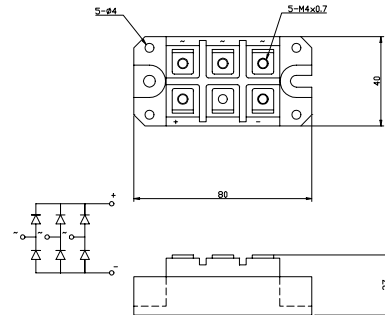
## FEATURES

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

## TYPICAL APPLICATIONS

- \* Rectified For General Use

## OUTLINE DRAWING



## Maximum Ratings

Approx Net Weight:105g

Parameter	Symbol	Type / Grade	Unit
		PT30S8	
Repetitive Peak Reverse Voltage *1	$V_{RRM}$	800	V
Non Repetitive Peak Reverse Voltage *1	$V_{RSM}$	1000	

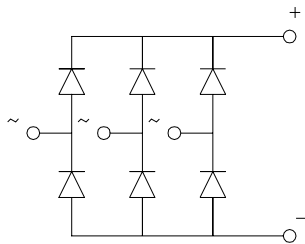
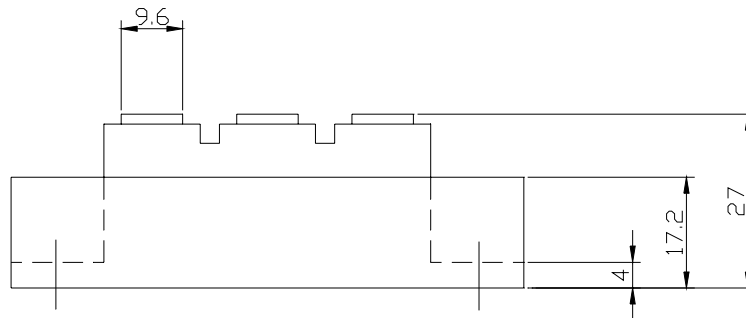
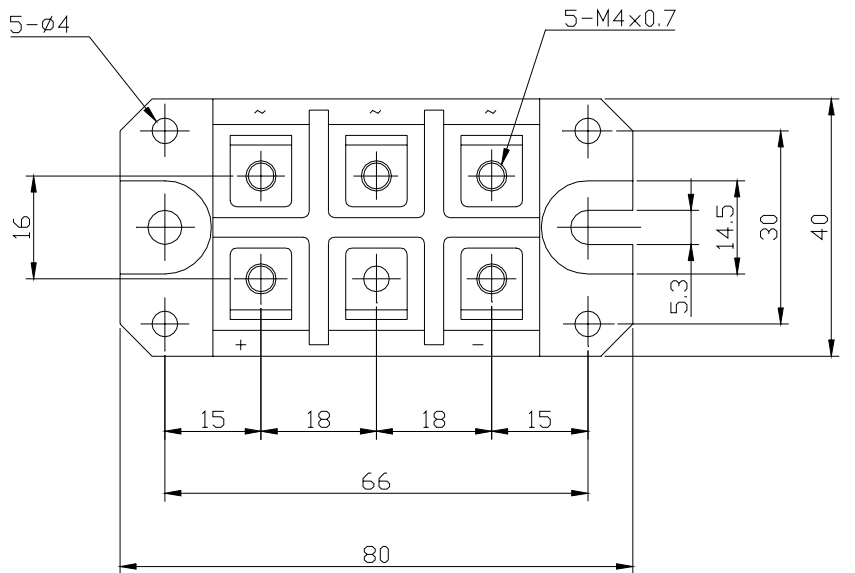
Parameter		Conditions	Max Rated Value	Unit	
Average Rectified Output Current	$I_{O(AV)}$	3-Phase Full Wave Rectified $T_c=123^{\circ}C$	30	A	
Surge Forward Current *1	$I_{FSM}$	50 Hz Half Sine Wave, 1Pulse Non-repetitive	450	A	
I Squared t *1	$I^2t$	2msec to 10msec	1000	A <sup>2</sup> s	
Operating Junction Temperature Range	$T_{jw}$		-40 to +150	$^{\circ}C$	
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	Greased	M5 Screw	N.m
	Terminals		M4		
			2.4 to 2.8		
			1.2 to 1.6		

## Electrical • Thermal Characteristics

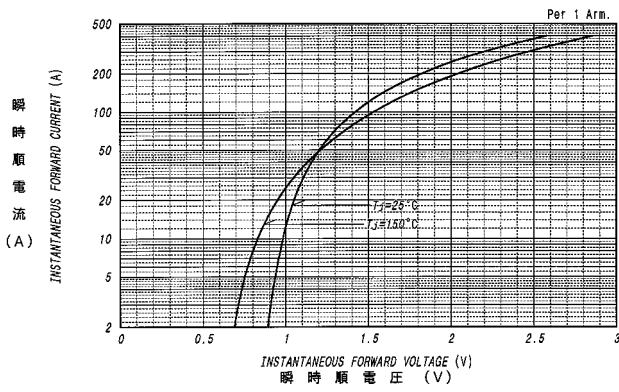
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	$I_{RM}$	$V_{RM}= V_{RRM}, T_j= 150^{\circ}C$	5	mA
Peak Forward Voltage *1	$V_{FM}$	$I_{FM}= 30A, T_j=25^{\circ}C$	1.1	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case (Total)	0.42	$^{\circ}C/W$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound (Total)	0.1	

\*1: Value Per 1Arm

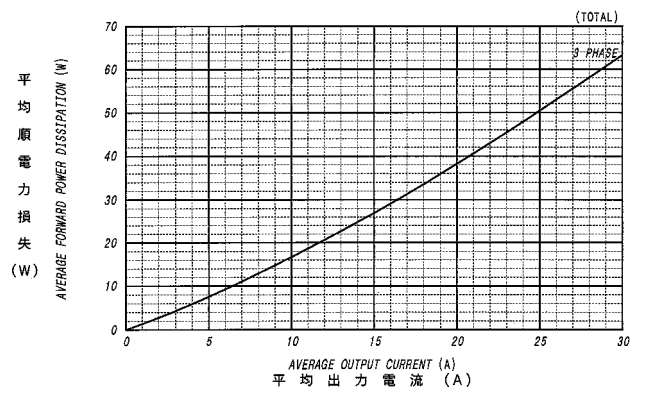
PT30S8 OUTLINE DRAWING (Dimensions in mm)



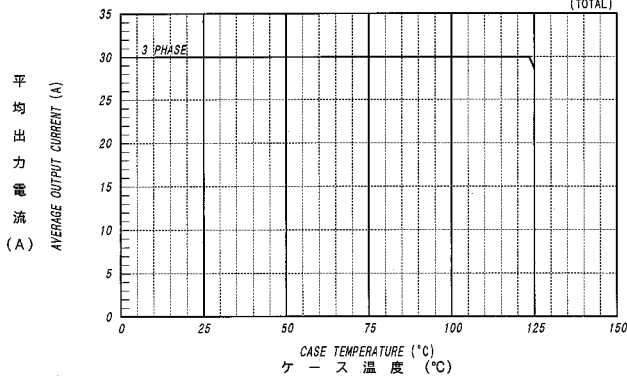
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



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,  $T_j=25^\circ\text{C}$

