

DIODE MODULE 30A/800V

PT30S8

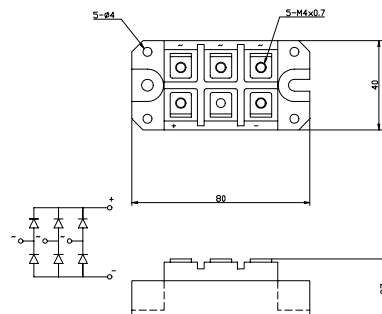
FEATURES

- * 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	

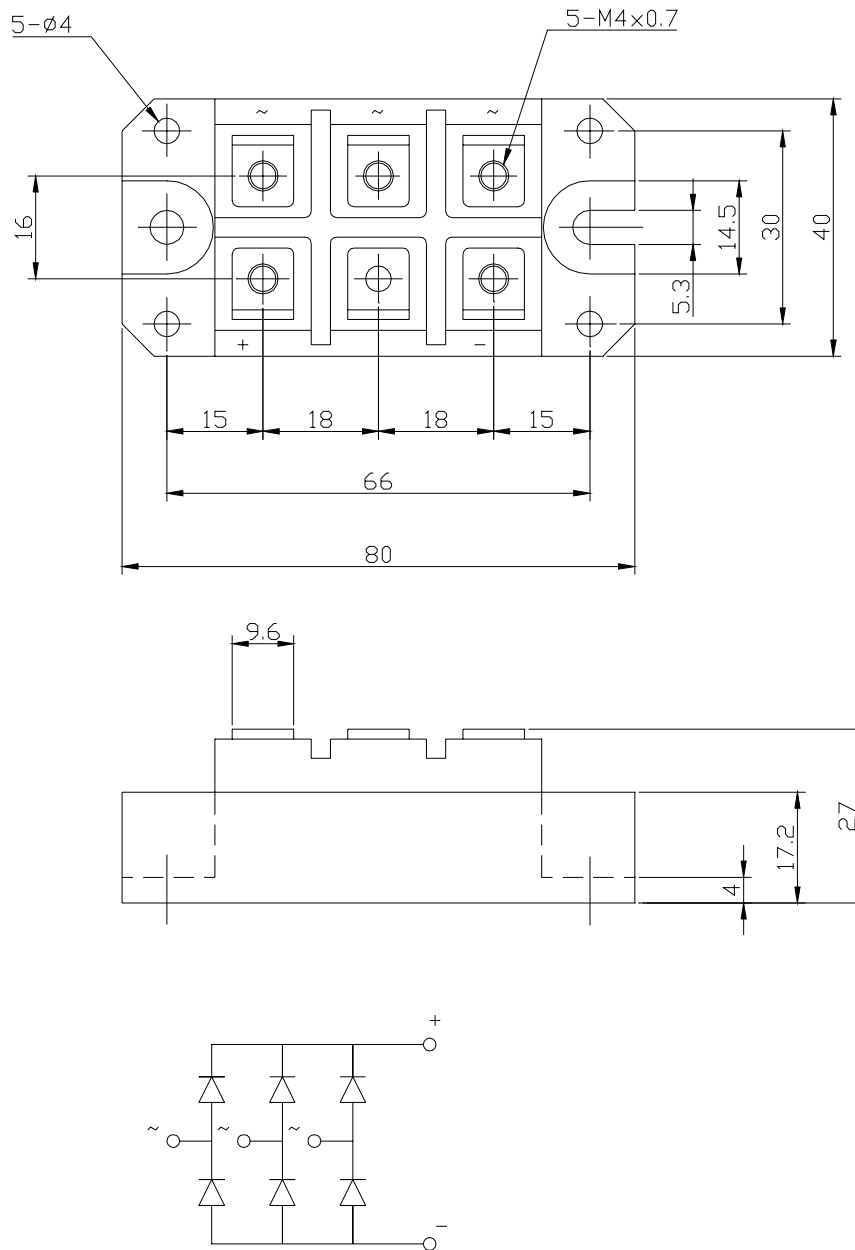
Parameter		Conditions	Max Rated Value	Unit
Average Rectified Output Current	$I_{O(AV)}$	3-Phase Full Wave Rectified $T_c=123^{\circ}\text{C}$	30	A
Surge Forward Current *1	I_{FSM}	50 Hz Half Sine Wave, 1Pulse Non-repetitive	450	A
I Squared t *1	I^2t	2msec to 10msec	1000	A^2s
Operating Junction Temperature Range	T_{jw}		-40 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}		-40 to +125	$^{\circ}\text{C}$
Isolation Voltage	Viso	Base Plate to Terminals, AC1min	2000	V
Mounting torque	Case mounting	Ftor	Greased	N.m
	Terminals		M5 Screw M4	
			2.4 to 2.8 1.2 to 1.6	

Electrical • Thermal Characteristics

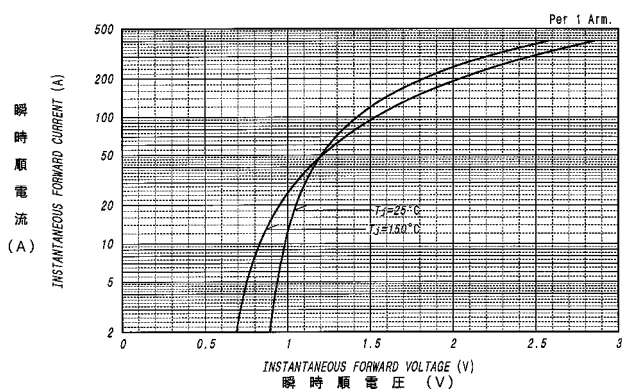
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	$V_{RM}= V_{RRM}$, $T_j= 150^{\circ}\text{C}$	5	mA
Peak Forward Voltage *1	V_{FM}	$I_{FM}= 30\text{A}$, $T_j=25^{\circ}\text{C}$	1.1	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case (Total)	0.42	$^{\circ}\text{C/W}$
	$R_{th(c-f)}$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

*1: Value Per 1Arm

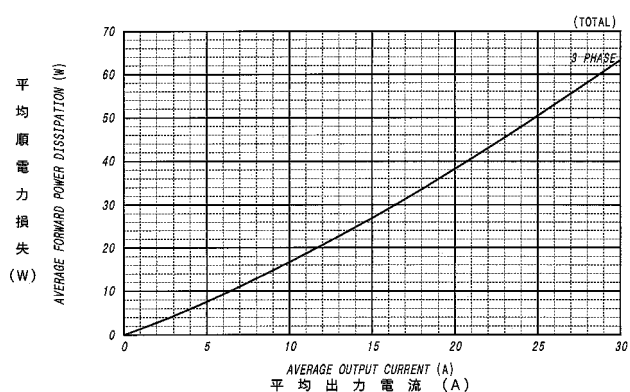
PT30S8 OUTLINE DRAWING (Dimensions in mm)



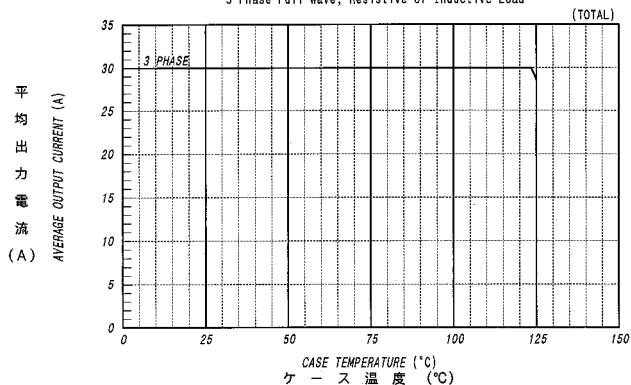
順電圧特性
FORWARD CURRENT VS. VOLTAGE



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

