

DIODE MODULE 50A/800V

PT518

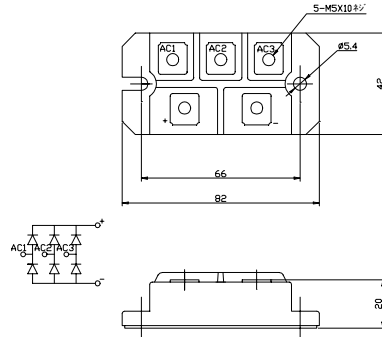
FEATURES

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

TYPICAL APPLICATIONS

- * Rectified For General Use

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:180g

Parameter	Symbol	Type / Grade		Unit
		PT518		
Repetitive Peak Reverse Voltage *1	V_{RRM}	800		V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	900		

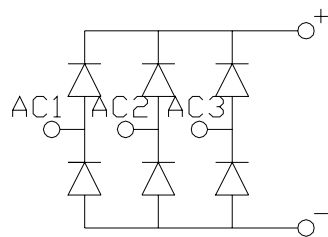
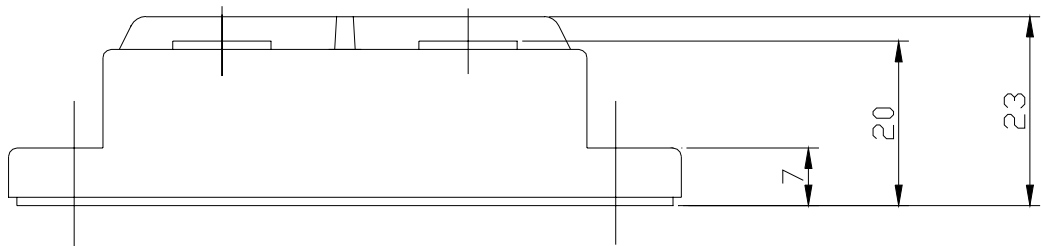
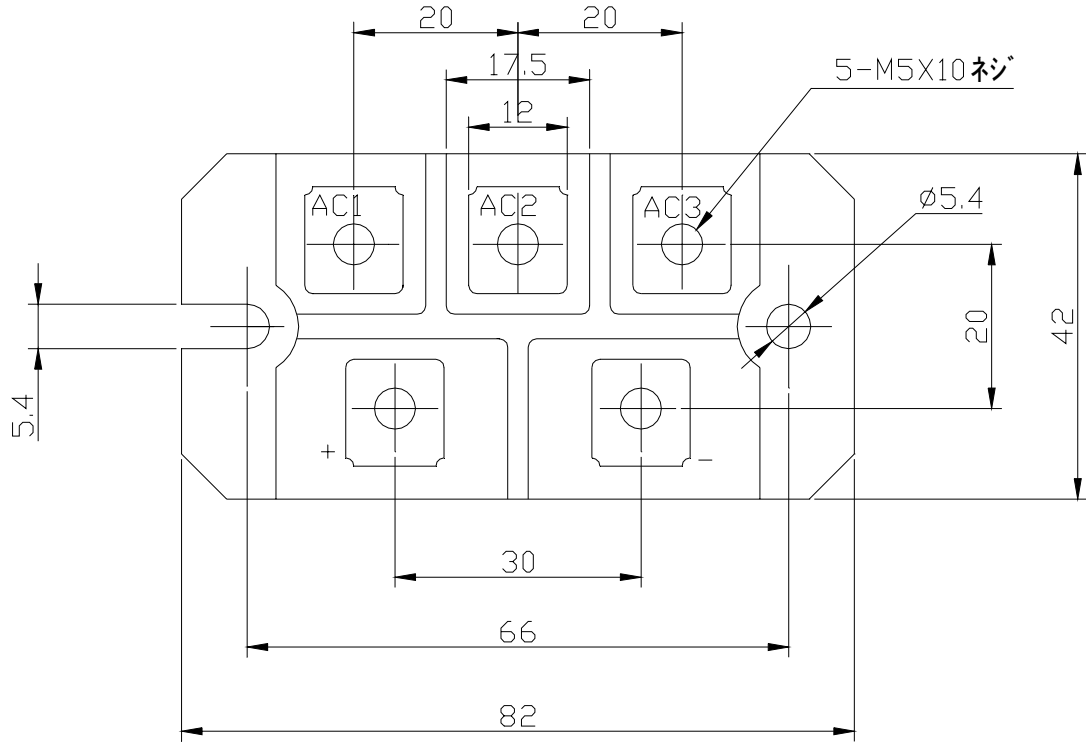
Parameter		Conditions	Max Rated Value	Unit	
Average Rectified Output Current	$I_{O(AV)}$	3-Phase Full Wave Rectified $T_c=116^\circ\text{C}$	50	A	
Surge Forward Current *1	I_{FSM}	50 Hz Half Sine Wave, 1Pulse Non-repetitive	700	A	
I Squared t *1	I^2t	2msec to 10msec	2450	A ² s	
Operating Junction Temperature Range	T_{jw}		-40 to +150	°C	
Storage Temperature Range	T_{stg}		-40 to +125	°C	
Isolation Voltage	Viso	Base Plate to Terminals, AC1min	2000	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

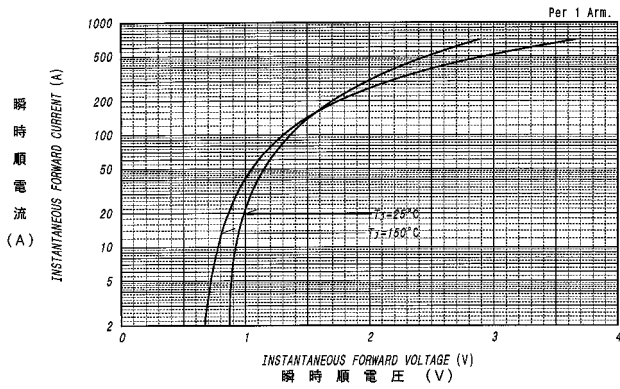
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	$V_{RM}= V_{RRM}, T_j= 150^\circ\text{C}$	10	mA
Peak Forward Voltage *1	V_{FM}	$I_{FM}= 50\text{A}, T_j=25^\circ\text{C}$	1.15	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case (Total)	0.27	°C/W
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound (Total)	0.06	

*1: Value Per 1Arm

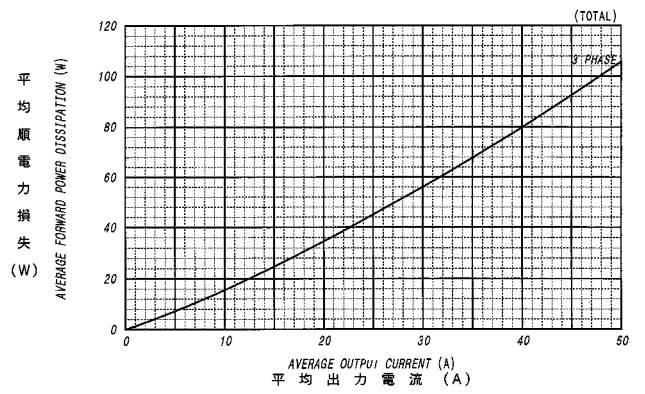
PT518 OUTLINE DRAWING (Dimensions in mm)



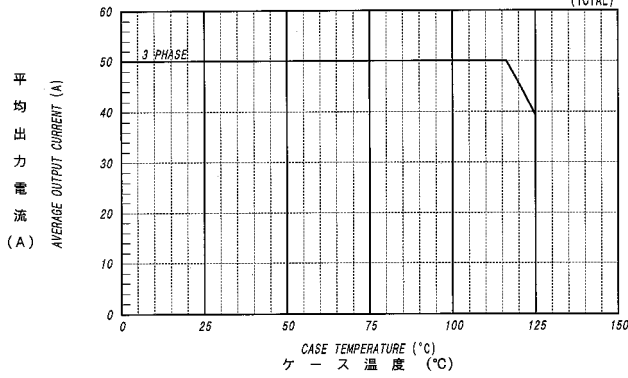
順電圧特性
FORWARD CURRENT VS. VOLTAGE



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



サージ順電流定格
SURGE CURRENT RATINGS

