

# DIODE MODULE 100A/800V

**PE1008N**
**PF1008N**

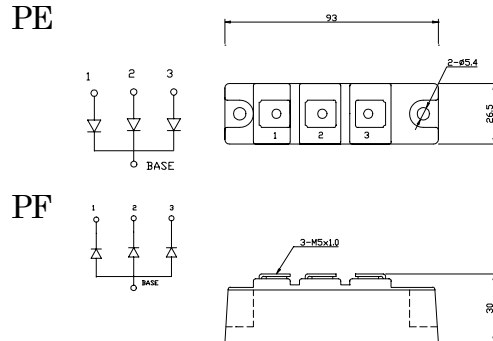
## FEATURES

- \* Cathode & Anode Common
- \* 3 Phase Half Bridge Circuit
- \* High Surge Capability
- \* UL Recognized, File No. E187184

## TYPICAL APPLICATIONS

- \* Rectified For General Use

## OUTLINE DRAWING



## Maximum Ratings

Approx Net Weight:155g

Parameter	Symbol	Type / Grade	Unit
		PE1008 / PF1008	
Repetitive Peak Reverse Voltage *1	$V_{RRM}$	800	V
Non Repetitive Peak Reverse Voltage *1	$V_{RSM}$	960	

Parameter		Conditions	Max Rated Value	Unit
Average Rectified Output Current *1	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=105^\circ\text{C}$	100	A
		3 Phase $T_c=100^\circ\text{C}$	88	A
Surge Forward Current *1	$I_{FSM}$	50 Hz Half Sine Wave, 1Pulse Non-repetitive	2000	A
I Squared t *1	$I^2t$	2msec to 10msec	20000	$\text{A}^2\text{s}$
Operating Junction Temperature Range	$T_{jw}$		-40 to +150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$		-40 to +125	$^\circ\text{C}$
Mounting torque	Case mounting	Greased	M5 Screw	N.m
	Terminals	M5 Screw		

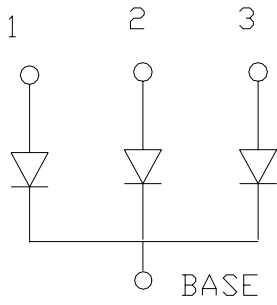
## Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	$I_{RM}$	$V_{RM}= V_{RRM}, T_j= 150^\circ\text{C}$	20	mA
Peak Forward Voltage *1	$V_{FM}$	$I_{FM}= 320\text{A}, T_j=25^\circ\text{C}$	1.25	V
Thermal Resistance *1	$R_{th(j-c)}$	Junction to Case	0.3	$^\circ\text{C/W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Joint Compound	0.2	

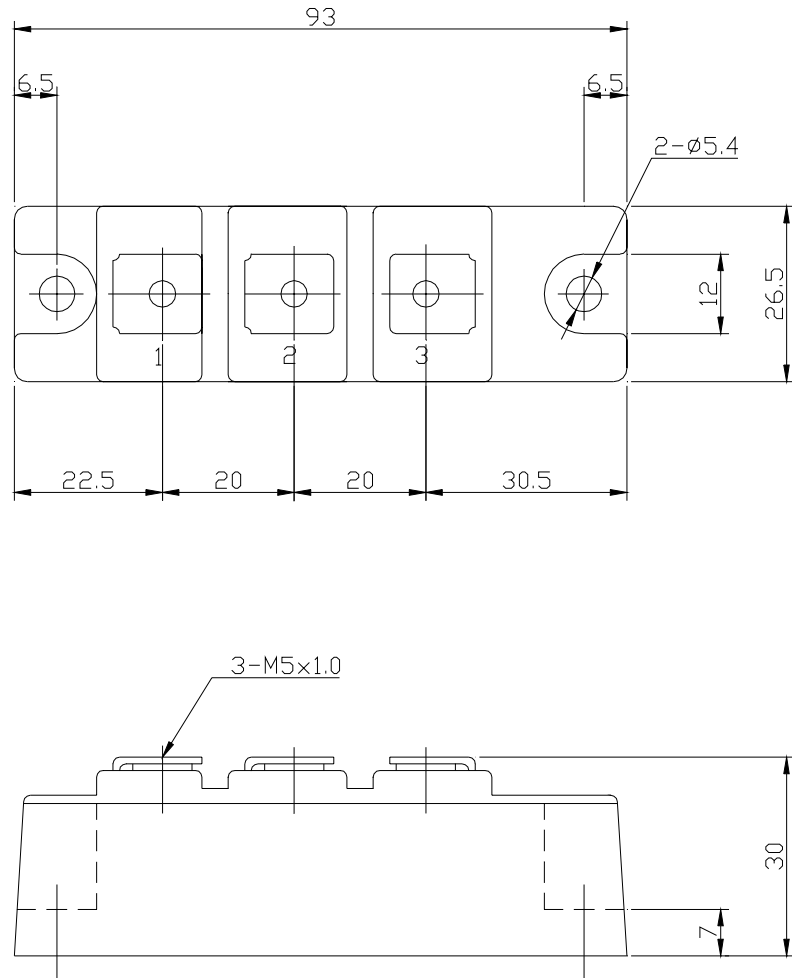
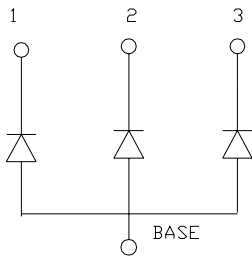
\*1: Value Per 1Arm

PE/PF1008 OUTLINE DRAWING (Dimensions in mm)

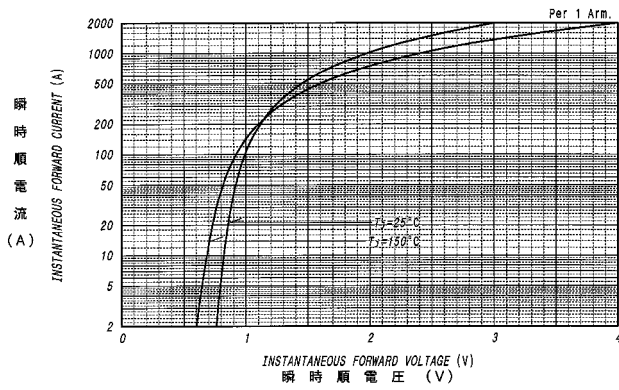
PE



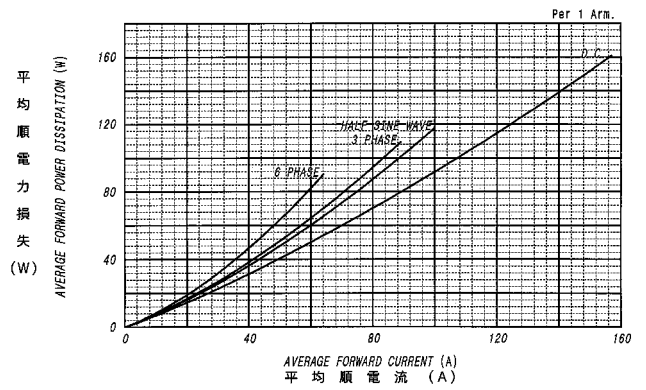
PF



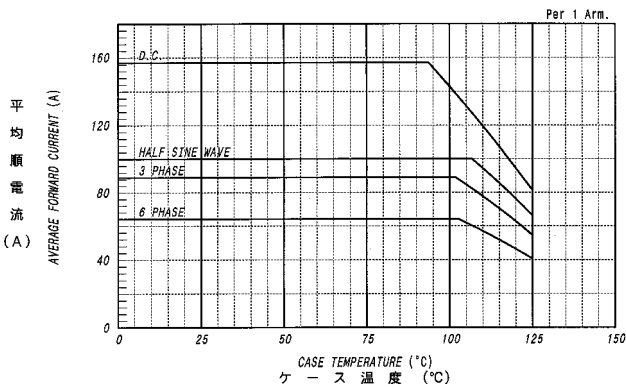
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



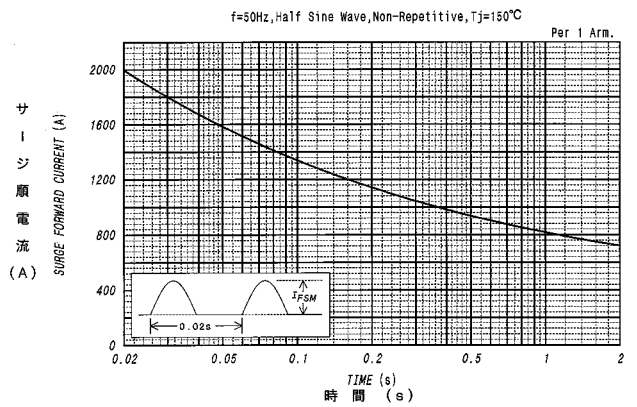
平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



平均順電流 - ケース温度定格  
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格  
SURGE CURRENT RATINGS



過渡熱抵抗特性  
MAXIMUM TRANSIENT THERMAL IMPEDANCE  
Junction to Case

