

# DIODE MODULE 30A/800V

**PE308N**
**PF308N**

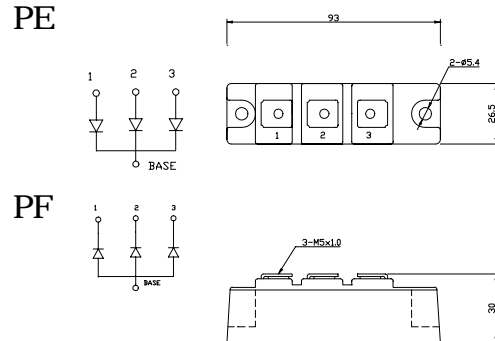
## FEATURES

- \* 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
		PE308 / PF308	
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 $T_c=125^\circ\text{C}$	30	A	
		3 Phase $T_c=121^\circ\text{C}$	27	A	
Surge Forward Current *1	$I_{FSM}$	50 Hz Half Sine Wave, 1cycle Non-repetitive	600	A	
I Squared t *1	$I^2t$	2msec to 10msec	1800	$\text{A}^2\text{s}$	
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	2.4 to 2.8	N.m
	Terminals	M5 Screw		2.4 to 2.8	

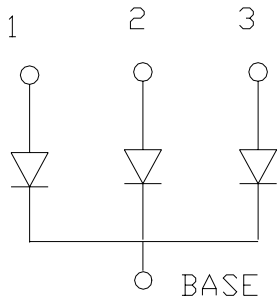
## Electrical • Thermal Characteristics

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	$V_{FM}$	$I_{FM}= 90\text{A}, T_j=25^\circ\text{C}$	1.25	V
Thermal Resistance *1	$R_{th(j-c)}$	Junction to Case	0.7	$^\circ\text{C/W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Joint Compound	0.2	

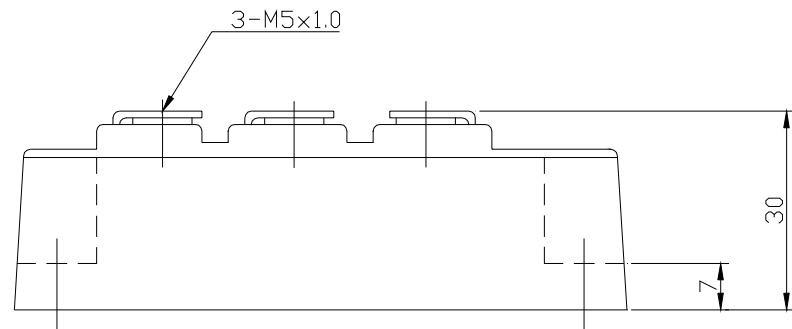
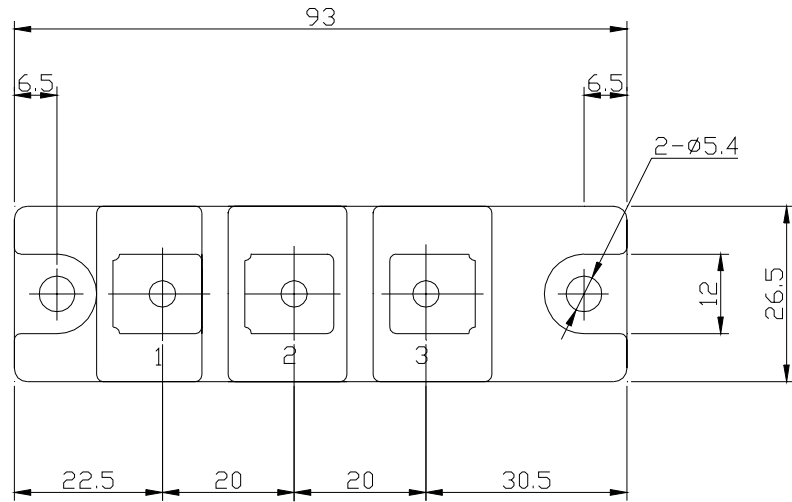
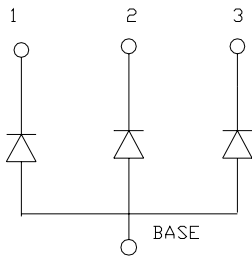
\*1: Value Per 1Arm

PE/PF308 OUTLINE DRAWING (Dimensions in mm)

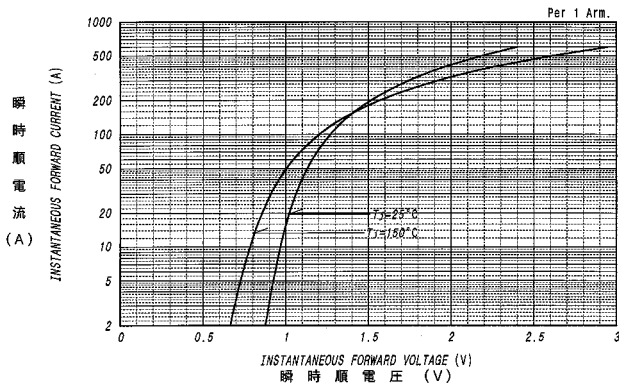
PE



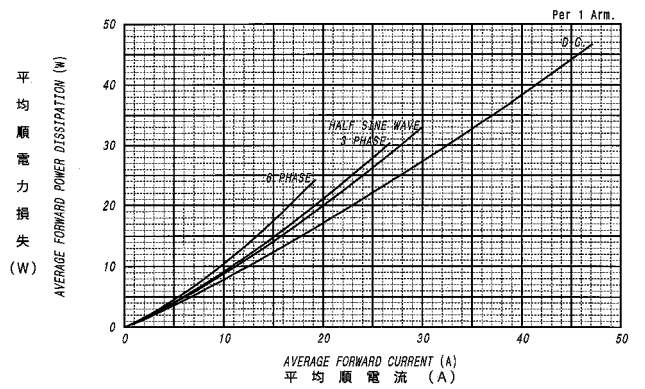
PF



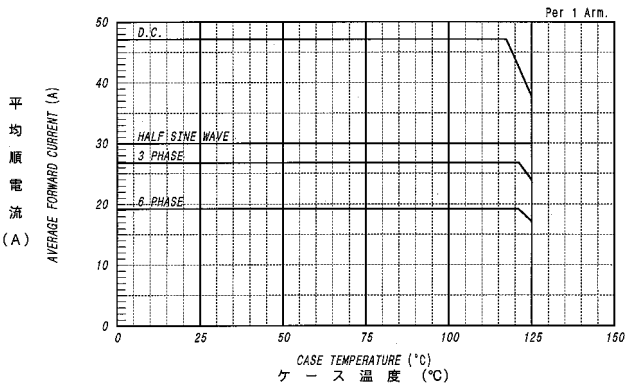
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



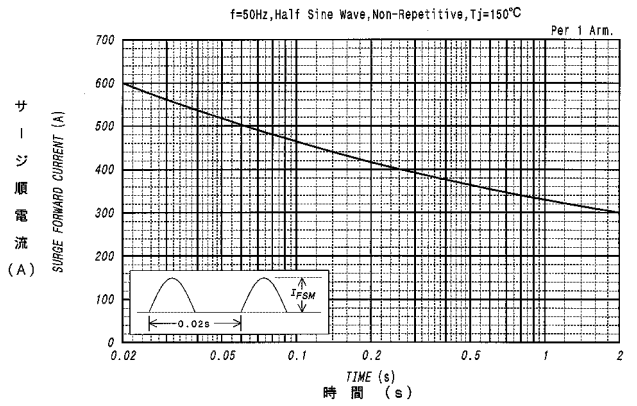
平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



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

