

# DIODE MODULE 30A/800V

PC308

PD308

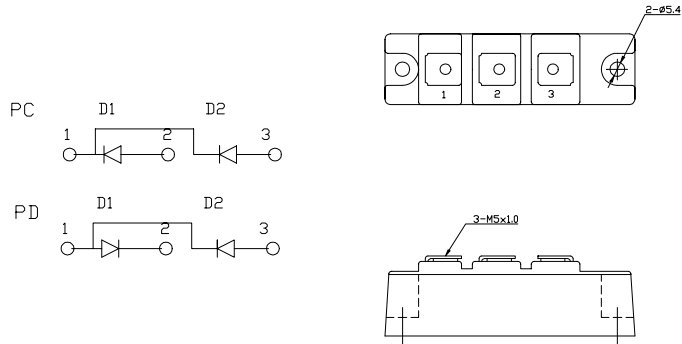
## FEATURES

- \* Isolated Base
- \* Dual Diodes Cathode Common and Cascaded 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
		PC308 / PD308	
Repetitive Peak Reverse Voltage *1	$V_{RRM}$	800	V
Non Repetitive Peak Reverse Voltage *1	$V_{RSM}$	960	

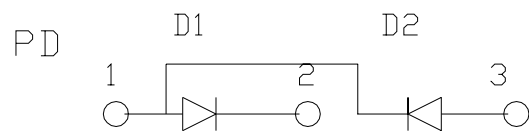
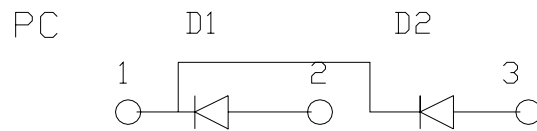
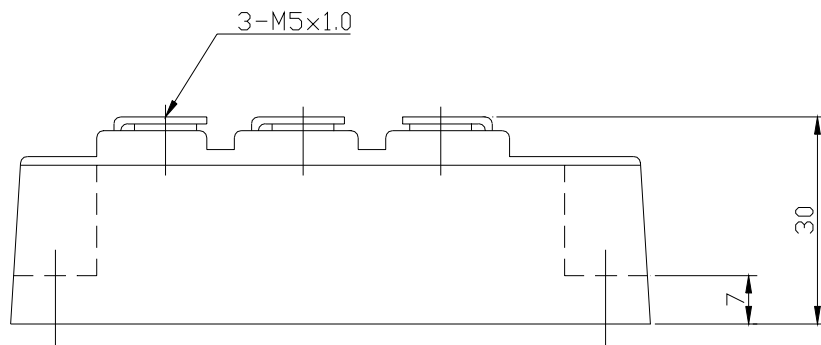
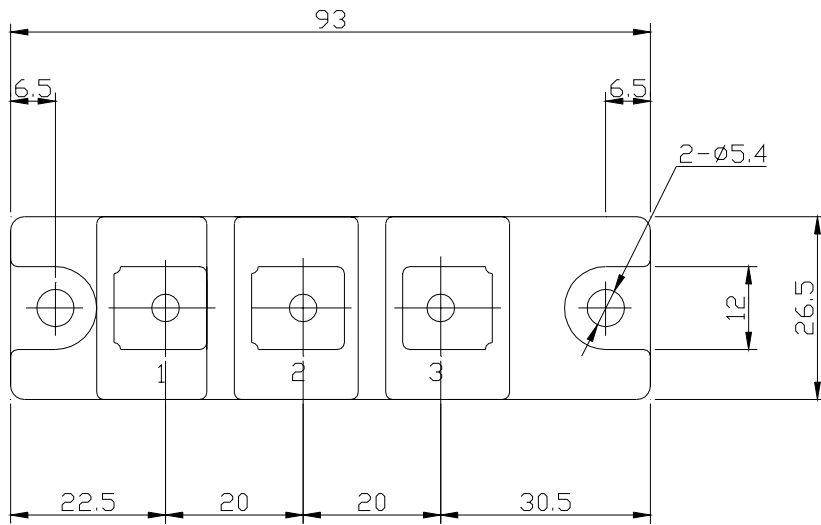
Parameter	Symbol	Conditions	Max Rated Value	Unit
Average Rectified Output Current *1	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=125^\circ\text{C}$	30	A
RMS Forward Current *1	$I_{F(RMS)}$		47	A
Surge Forward Current *1	$I_{FSM}$	50 Hz Half Sine Wave, 1Pulse Non-repetitive	600	A
I Squared t *1	$I^2t$	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	$^\circ\text{C}$
Isolation Voltage	$V_{iso}$	Base Plate to Terminals, AC1min	2000	V
Mounting torque	Case mounting	$F_{tor}$	M5 Screw	N.m
	Terminals		M5 Screw	

## Electrical • Thermal Characteristics

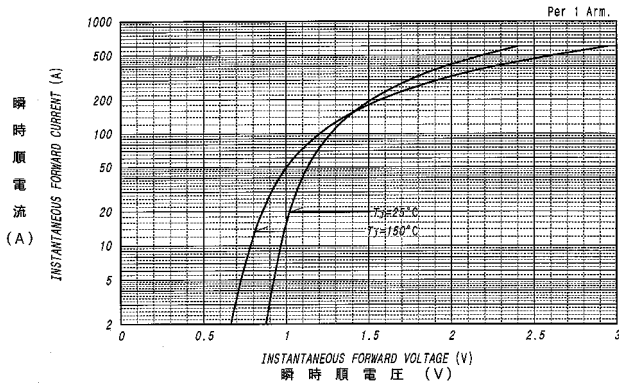
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	$I_{RM}$	$V_{RM} = V_{RRM}$ , $T_j = 150^\circ\text{C}$	10	mA
Peak Forward Voltage *1	$V_{FM}$	$I_{FM} = 90\text{A}$ , $T_j = 25^\circ\text{C}$	1.25	V
Thermal Resistance *1	$R_{th(j-c)}$	Junction to Case	0.7	$^\circ\text{C}/\text{W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound	0.2	

\*1: Value Per 1Arm

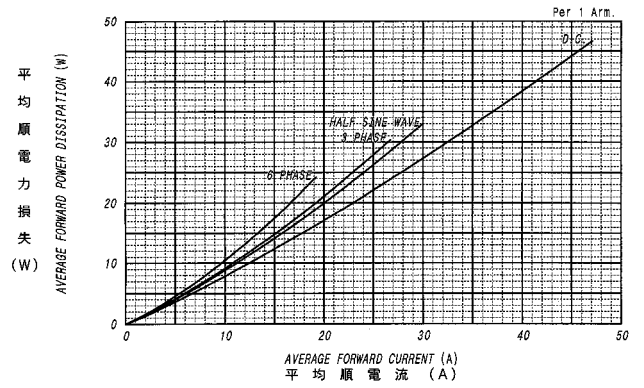
PC/PD308 OUTLINE DRAWING (Dimensions in mm)



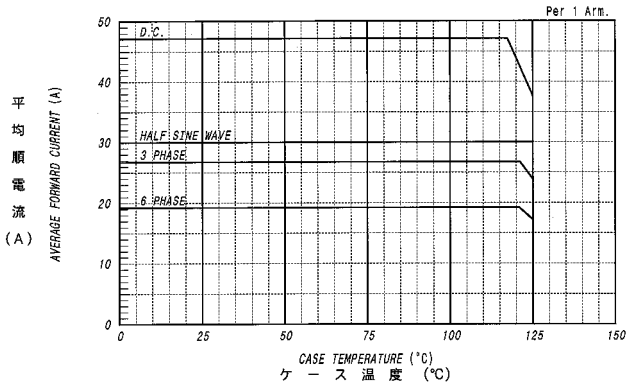
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



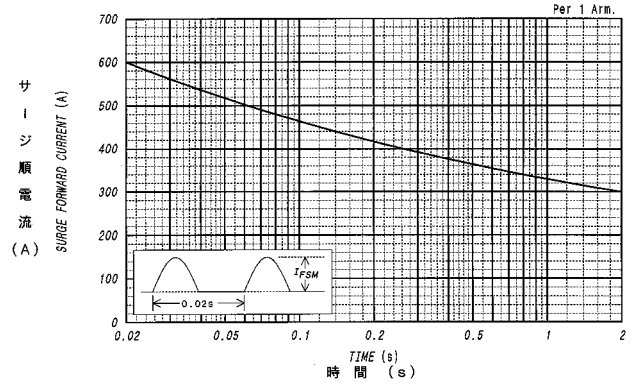
平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



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

