

# DIODE MODULE 250A/1200,1600V

PC25012, PC25016

PD25012, PD25016

## FEATURES

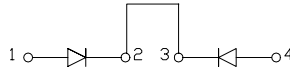
- \* Isolated Base
- \* Dual Diodes Cathode Common and Cascaded Circuit
- \* High Surge Capability
- \* UL Recognized, File No. E187184

## TYPICAL APPLICATIONS

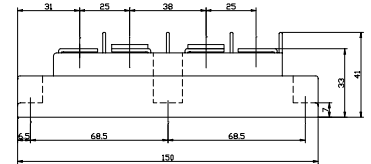
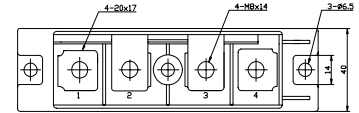
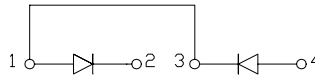
- \* Rectified For General Use

## OUTLINE DRAWING

PC



PD



## Maximum Ratings

Approx Net Weight:530g

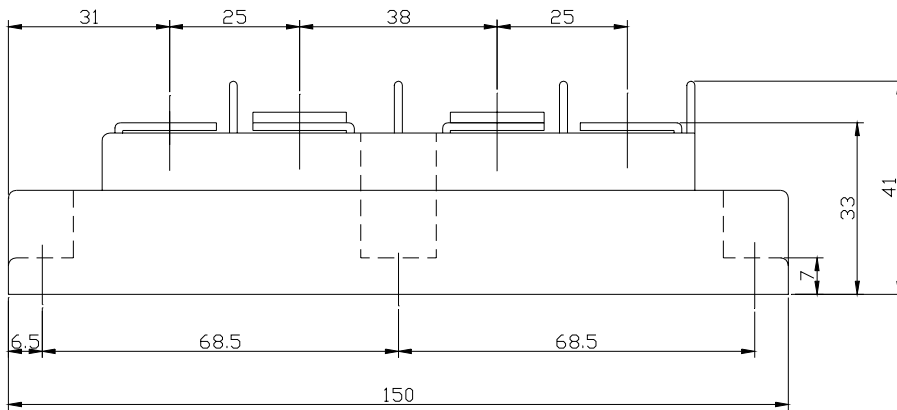
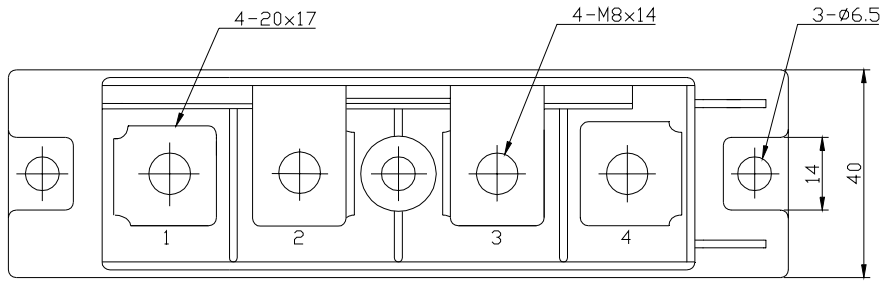
Parameter	Symbol	Type / Grade		Unit
		PC/D25012	PC/PD25016	
Repetitive Peak Reverse Voltage	$V_{RRM}$	1200	1600	V
Non Repetitive Peak Reverse Voltage	$V_{RSM}$	1300	1700	

Parameter		Conditions	Max Rated Value	Unit	
Average Rectified Output Current	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=68^\circ\text{C}$	250	A	
RMS Forward Current	$I_{F(RMS)}$		390	A	
Surge Forward Current	$I_{FSM}$	50 Hz Half Sine Wave, 1cycle Non-repetitive	5000	A	
I Squared t	$I^2t$	2msec to 10msec	125000	$\text{A}^2\text{s}$	
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	Viso	Base Plate to Terminals, AC1min	2000	V	
Mounting torque	Case mounting	Ftor	M6 Screw	2.5 to 3.5	N.m
	Terminals		M8 Screw	9.0 to 10.0	

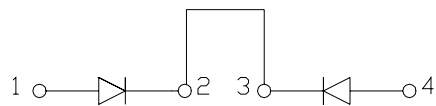
## Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current	$I_{RM}$	$V_{RM} = V_{RRM}$ , $T_j = 125^\circ\text{C}$	30	mA
Peak Forward Voltage	$V_{FM}$	$I_{FM} = 800\text{A}$ , $T_j = 25^\circ\text{C}$	1.35	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	0.18	$^\circ\text{C}/\text{W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound	0.1	

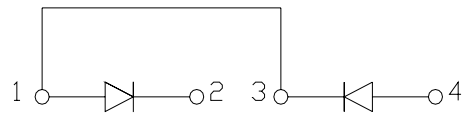
PC/D2501x OUTLINE DRAWING (Dimensions in mm)



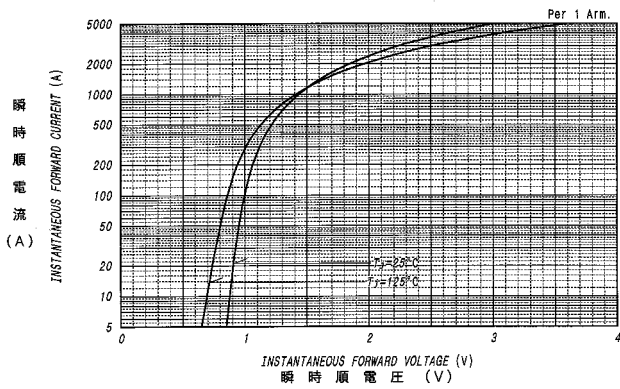
PC



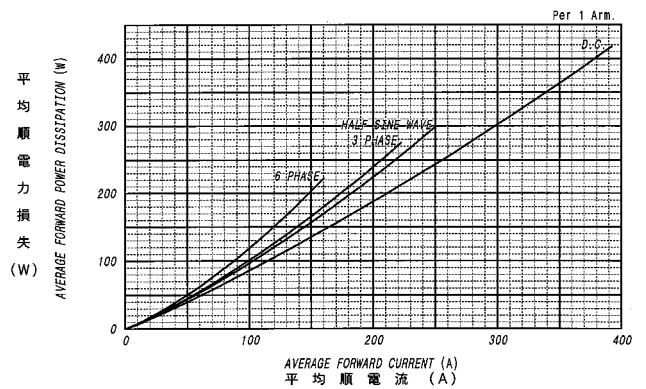
PD



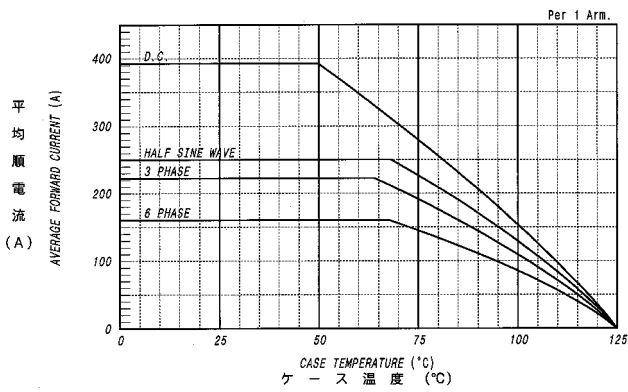
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



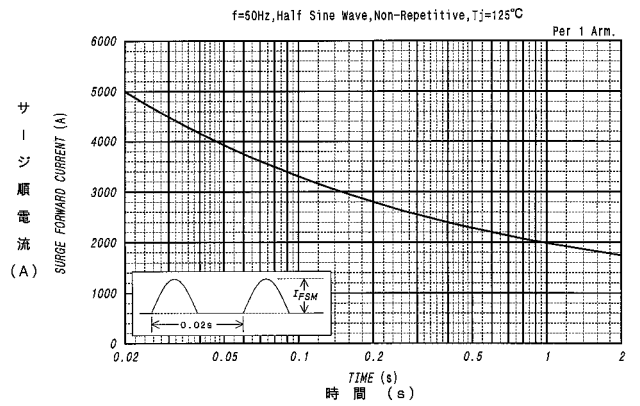
平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



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

