

# DIODE MODULE 250A/300 to 800V

PC2503, PC2504, PC2508

PD2503, PD2504, PD2508

## FEATURES

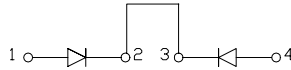
- \* Isolated Base
- \* Dual Diodes Cathode Common and Cascaded Circuit
- \* High Surge Capability
- \* UL Recognized, File No. E187184

## TYPICAL APPLICATIONS

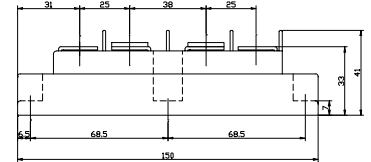
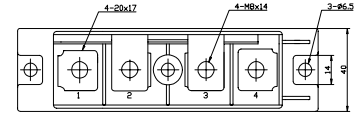
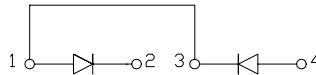
- \* Rectified For General Use

## OUTLINE DRAWING

PC



PD



## Maximum Ratings

Approx Net Weight: 530g

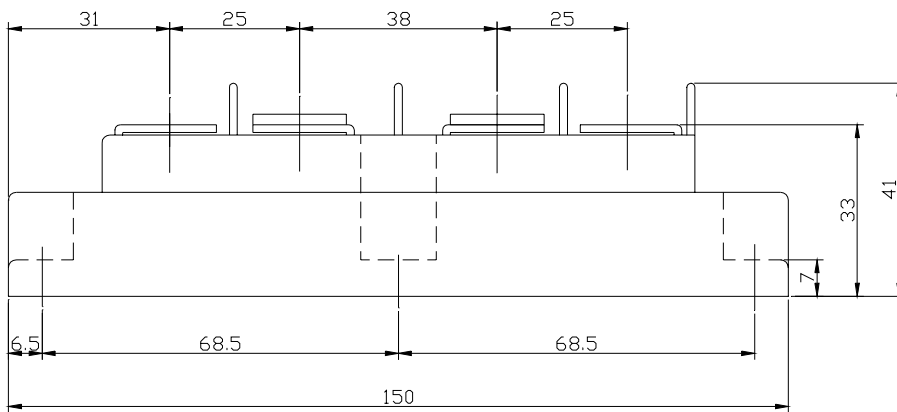
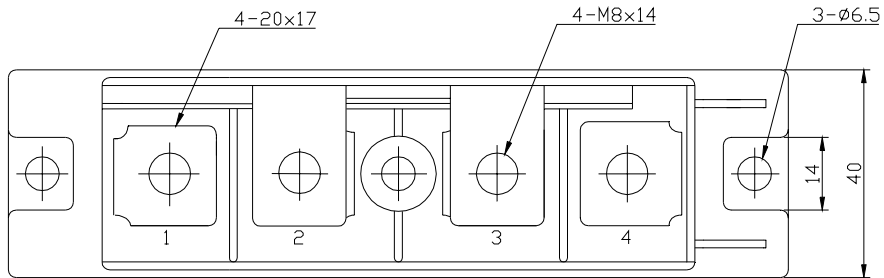
Parameter	Symbol	Type / Grade			Unit
		PC/D2503	PC/D2504	PC/D2508	
Repetitive Peak Reverse Voltage	$V_{RRM}$	300	400	800	V
Non Repetitive Peak Reverse Voltage	$V_{RSM}$	400	500	900	

Parameter		Symbol	Conditions	Max Rated Value	Unit
Average Rectified Output Current		$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=95^\circ\text{C}$	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	

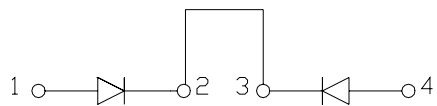
## Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current	$I_{RM}$	$V_{RM} = V_{RRM}$ , $T_j = 150^\circ\text{C}$	40	mA
Peak Forward Voltage	$V_{FM}$	$I_{FM} = 800\text{A}$ , $T_j = 25^\circ\text{C}$	1.22	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	0.2	$^\circ\text{C/W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound	0.1	

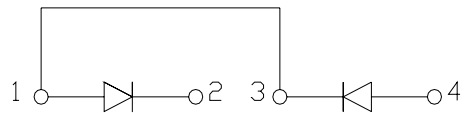
PC/D250x OUTLINE DRAWING (Dimensions in mm)



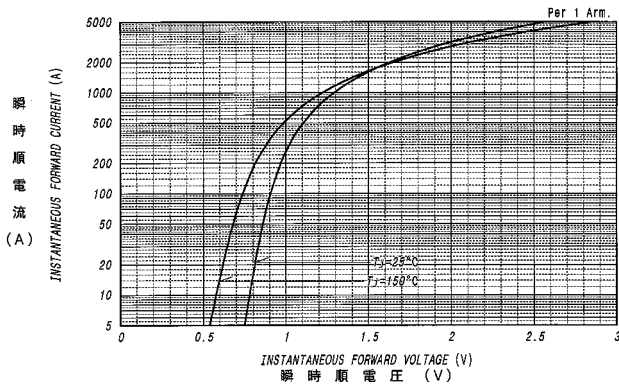
PC



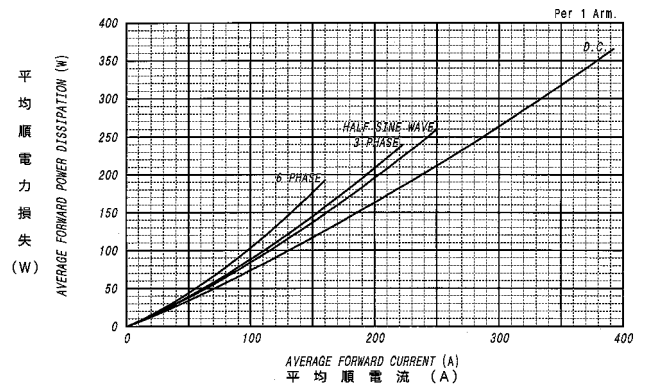
PD



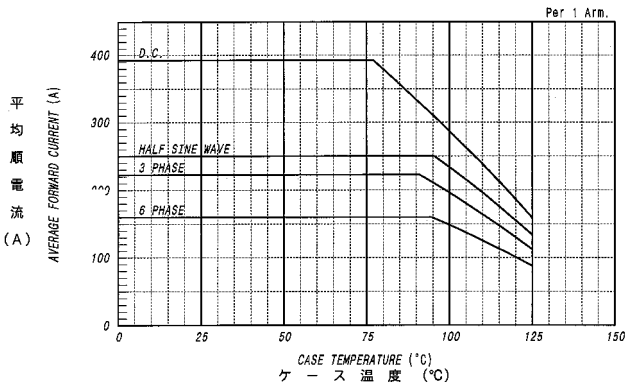
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



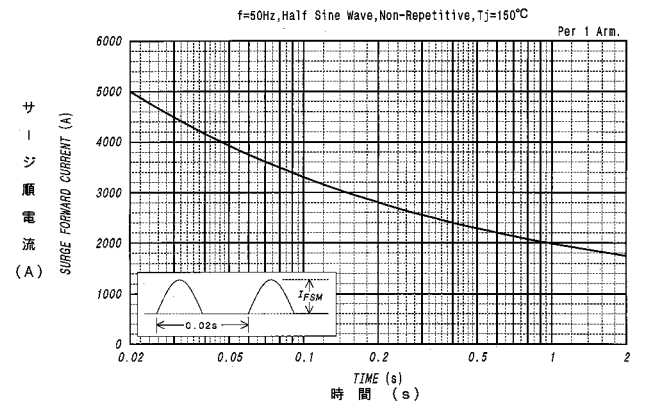
平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



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

