

DIODE MODULE 250A/300 to 800V

PC2503,PC2504,PC2508

PD2503,PD2504,PD2508

FEATURES

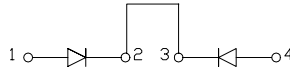
- * Isolated Base
- * Dual Diodes Cathode Common and Cascaded Circuit
- * High Surge Capability
- * UL Recognized, File No. E187184

TYPICAL APPLICATIONS

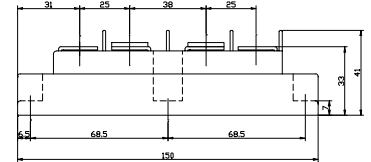
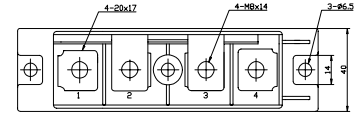
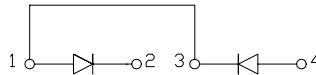
- * Rectified For General Use

OUTLINE DRAWING

PC



PD



Maximum Ratings

Approx Net Weight:530g

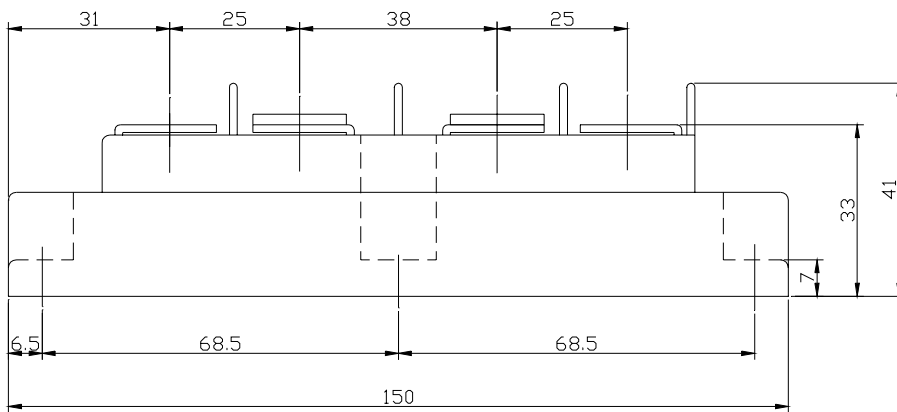
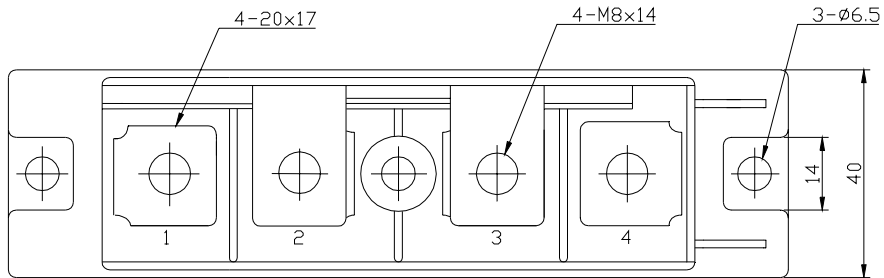
Parameter	Symbol	Type / Grade			Unit
		PC/D2503	PC/D2504	PC/D2508	
Repetitive Peak Reverse Voltage	V_{RRM}	300	400	800	V
Non Repetitive Peak Reverse Voltage	V_{RSM}	400	500	900	

Parameter		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	A^2s	
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	

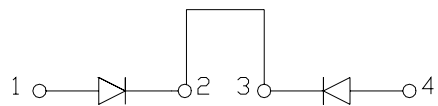
Electrical • Thermal Characteristics

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	$^\circ\text{C}/\text{W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound	0.1	

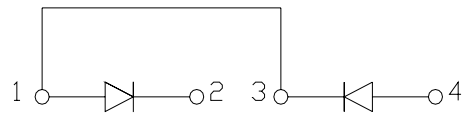
PC/D250x OUTLINE DRAWING (Dimensions in mm)



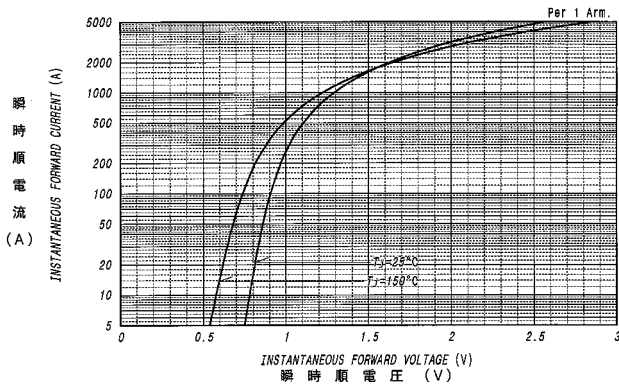
PC



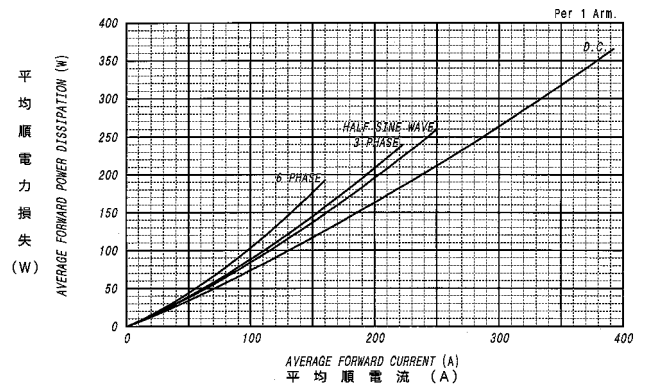
PD



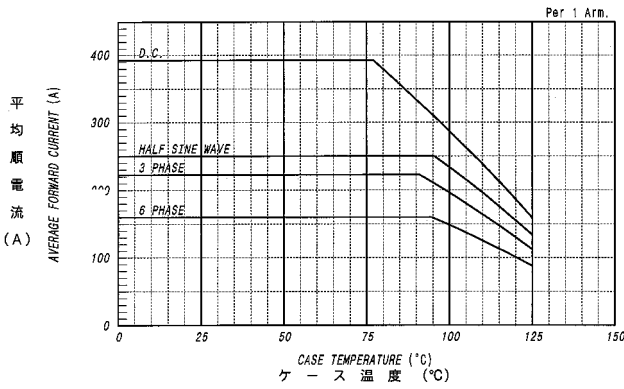
順電圧特性
FORWARD CURRENT VS. VOLTAGE



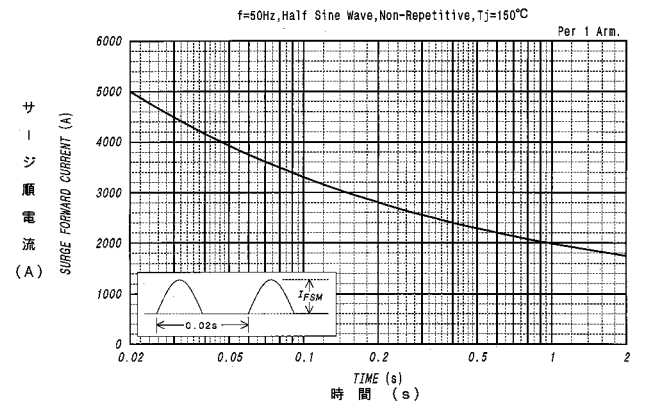
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION



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

