

DIODE MODULE 250A/300 to 800V

PC2503,PC2504,PC2508

PD2503,PD2504,PD2508

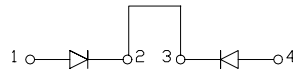
FEATURES

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

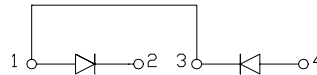
TYPICAL APPLICATIONS

- * Rectified For General Use

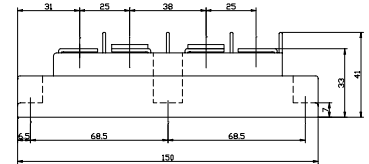
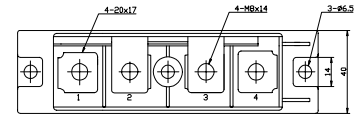
PC



PD



OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:530g

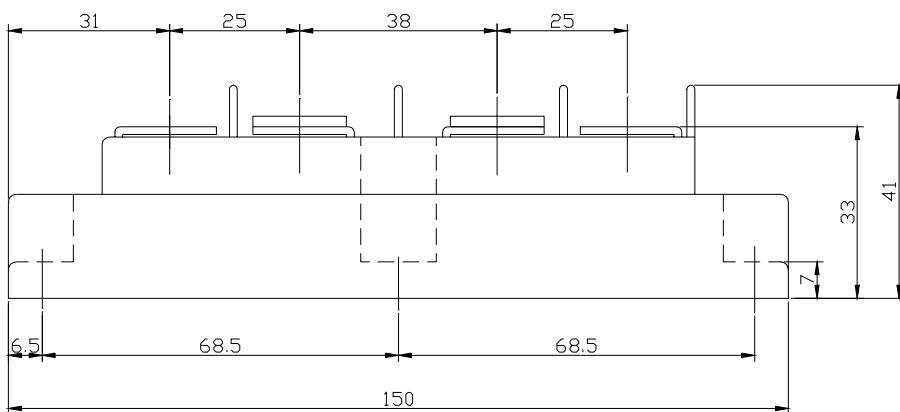
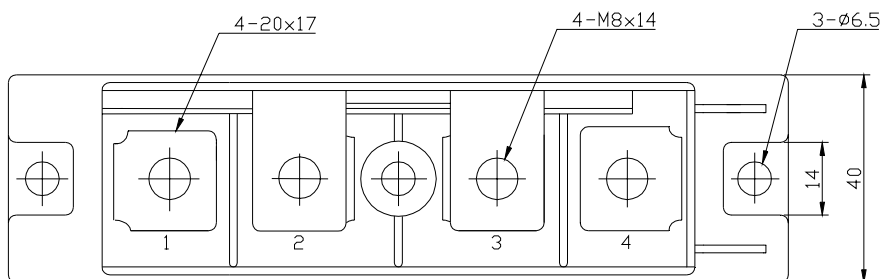
Parameter	Symbol	Type / Grade			Unit
		PC/D2503	PC/D2504	PC/D2508	
Repetitive Peak Reverse Voltage	V_{RRM}	300	400	800	V
Non Repetitive Peak Reverse Voltage	V_{RSM}	400	500	900	

Parameter			Conditions	Max Rated Value	Unit
Average Rectified Output Current		$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=95^{\circ}C$	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 ² s
Operating Junction Temperature Range		T_{jw}		-40 to +150	°C
Storage Temperature Range		T_{stg}		-40 to +125	°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	

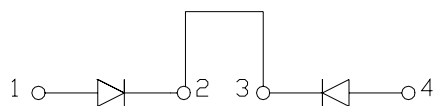
Electrical • Thermal Characteristics

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

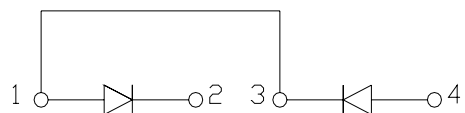
PC/D250x OUTLINE DRAWING (Dimensions in mm)



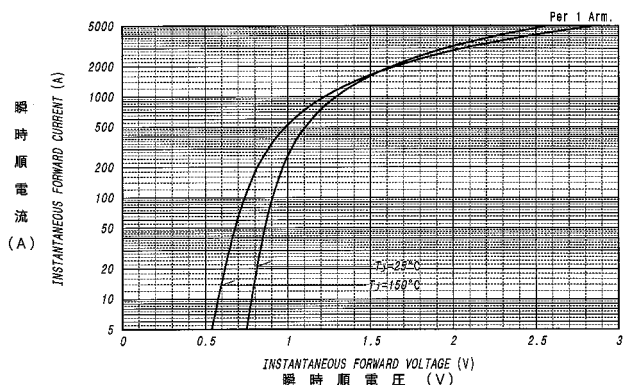
PC



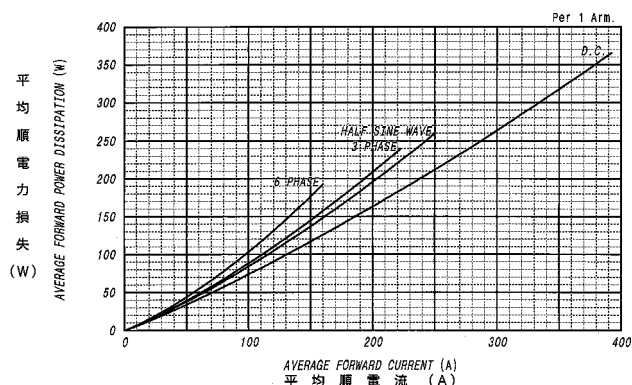
PD



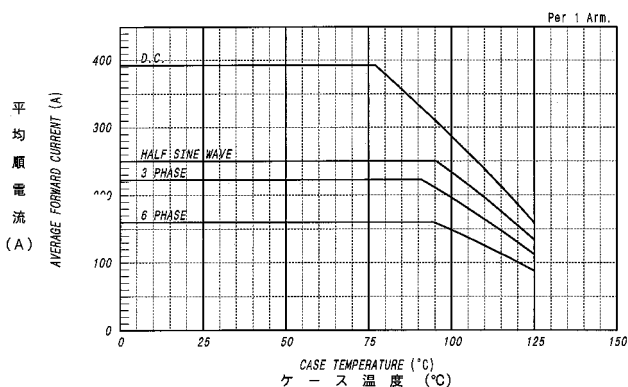
順電圧特性
FORWARD CURRENT VS. VOLTAGE



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

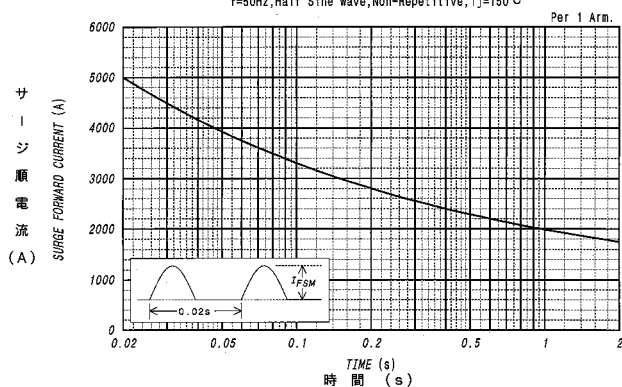


平均順電流 - ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格
SURGE CURRENT RATINGS

$f=50\text{Hz}$, Half Sine Wave, Non-Repetitive, $T_j=150^\circ\text{C}$



過渡熱抵抗特性
MAXIMUM TRANSIENT THERMAL IMPEDANCE
Junction to Case

