

DIODE MODULE 400A / 800V

PC4008, PD4008

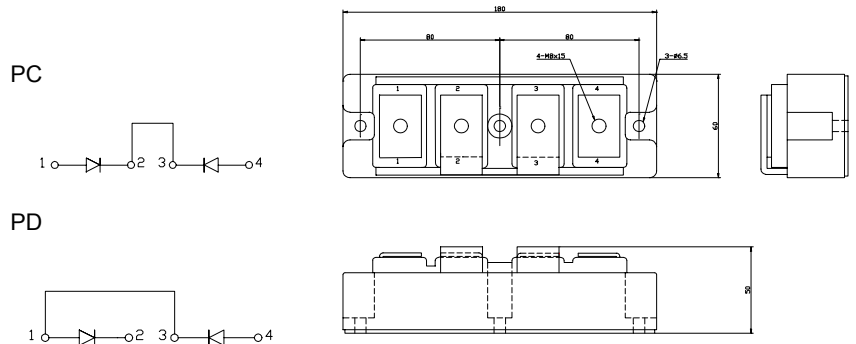
FEATURES

- * 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:1300g

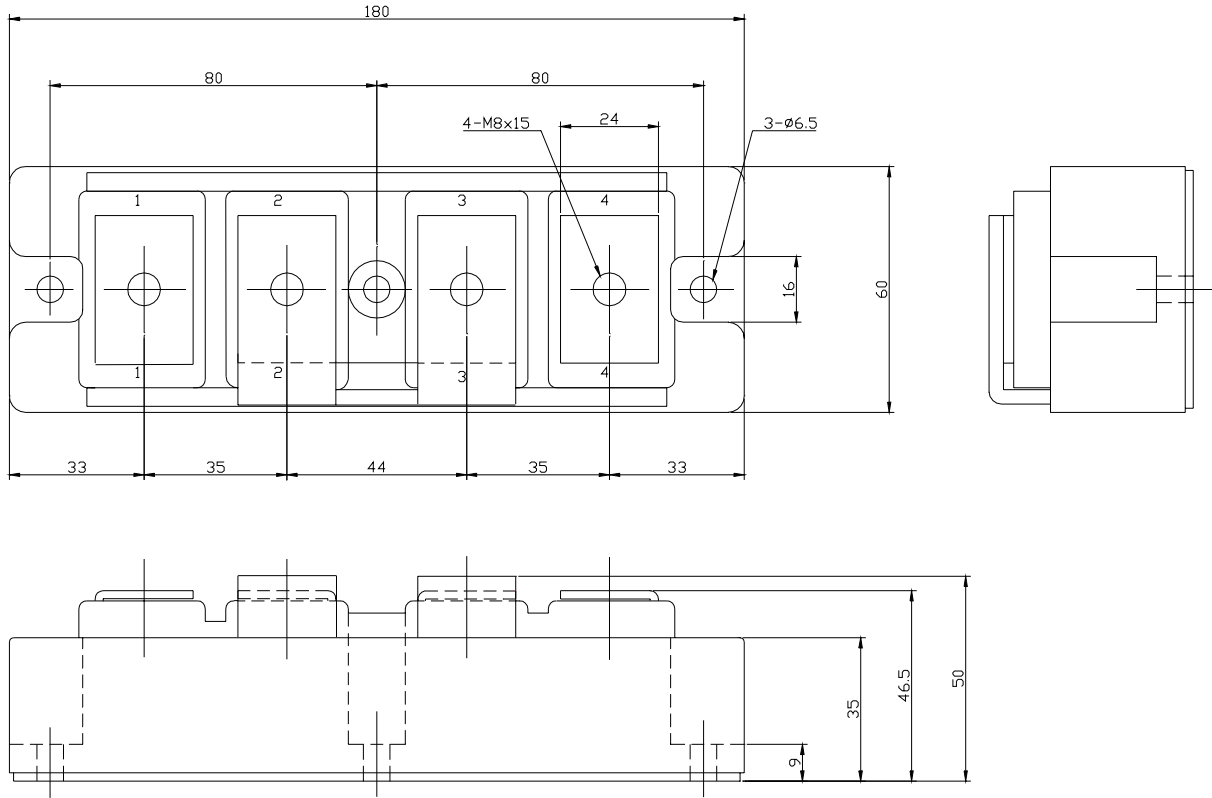
Parameter	Symbol	Type / Grade	Unit
		PC/D4008	
Repetitive Peak Reverse Voltage	V_{RRM}	800	V
Non Repetitive Peak Reverse Voltage	V_{RSM}	960	

Parameter		Conditions	Max Rated Value	Unit	
Average Rectified Output Current	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=94^\circ\text{C}$	400	A	
RMS Forward Current	$I_{F(RMS)}$		630	A	
Surge Forward Current	I_{FSM}	50 Hz Half Sine Wave, 1Pulse Non-repetitive	8000	A	
I Squared t	I^2t	2msec to 10msec	320000	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	

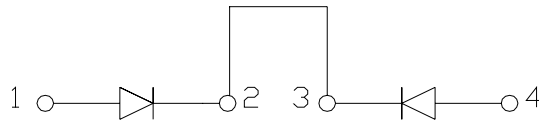
Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current	I_{RM}	$V_{RM} = V_{RRM}$, $T_j = 150^\circ\text{C}$	30	mA
Peak Forward Voltage	V_{FM}	$I_{FM} = 1300\text{A}$, $T_j = 25^\circ\text{C}$	1.25	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	0.12	$^\circ\text{C}/\text{W}$
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound	0.05	

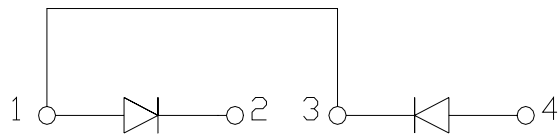
PC/D4008 OUTLINE DRAWING (Dimensions in mm)



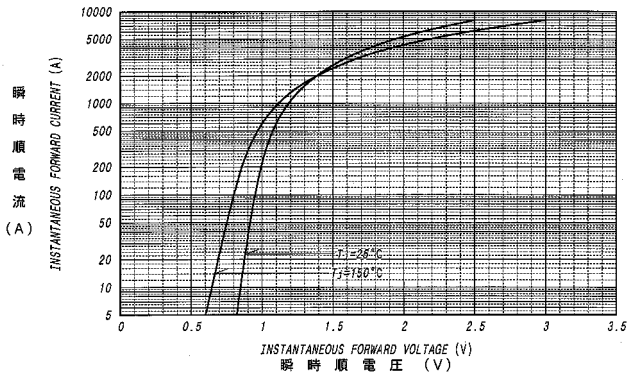
PC



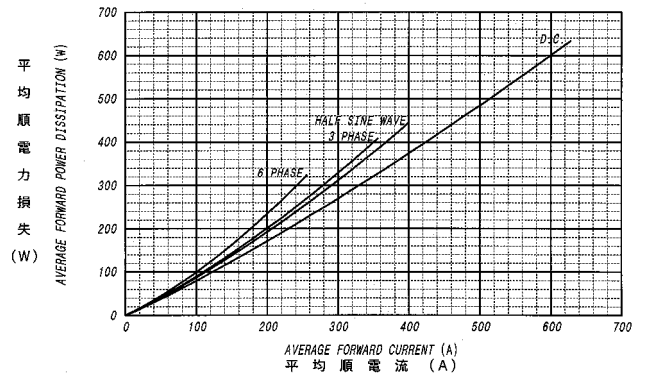
PD



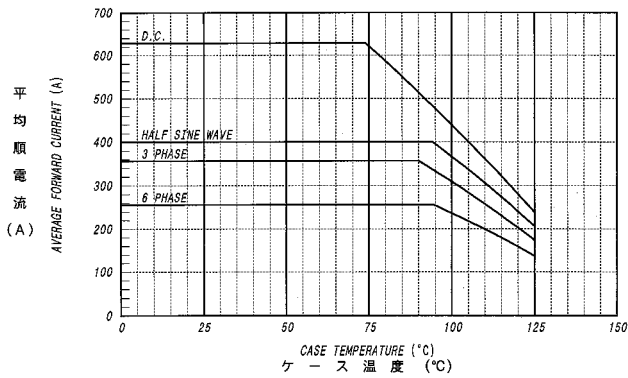
順電圧特性
FORWARD CURRENT VS. VOLTAGE



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

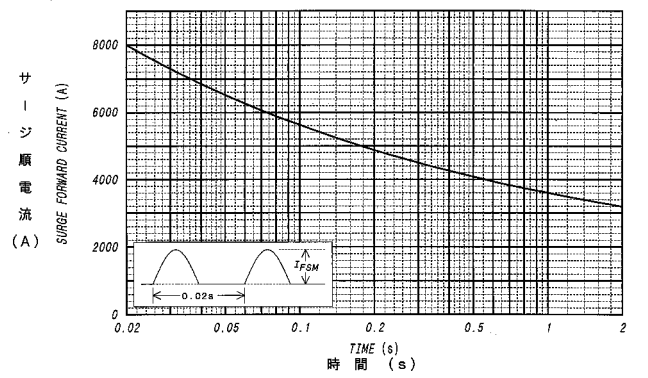


平均順電流 - ケース温度定格
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格
SURGE CURRENT RATINGS

f=50Hz, 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

