

# DIODE MODULE 250A/300 to 800V PH2503,PH2504,PH2508

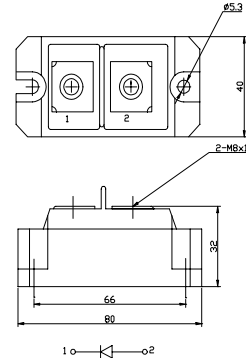
## FEATURES

- \* Isolated Base
- \* High Surge Capability
- \* UL Recognized, File No. E187184

## TYPICAL APPLICATIONS

- \* Rectified For General Use

## OUTLINE DRAWING



## Maximum Ratings

Approx Net Weight:220g

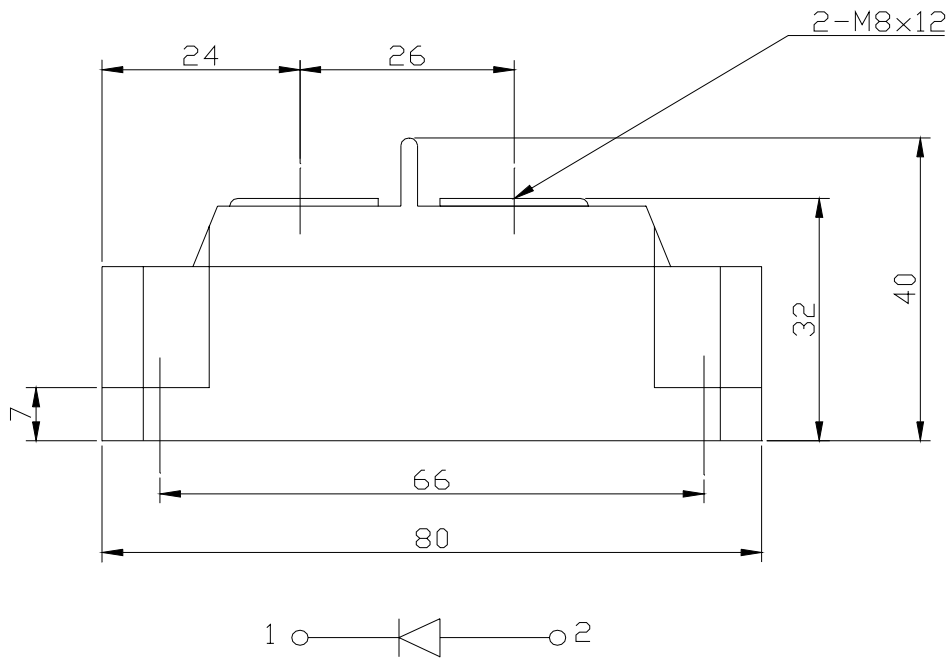
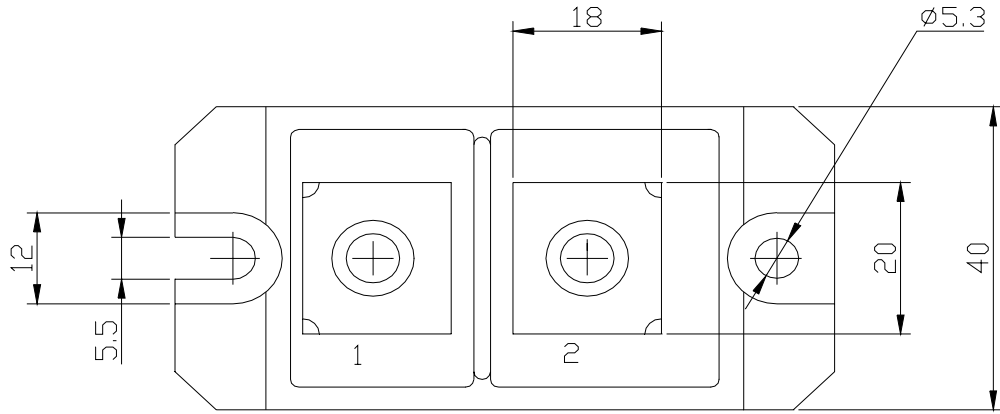
Parameter	Symbol	Type / Grade			Unit
		PH2503	PH2504	PH2508	
Repetitive Peak Reverse Voltage	$V_{RRM}$	300	400	800	V
Non Repetitive Peak Reverse Voltage	$V_{RSM}$	400	500	900	

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, 1Pulse 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	M5 Screw	2.4 to 2.8	N.m
	Terminals		M8 Screw	9.0 to 10.0	

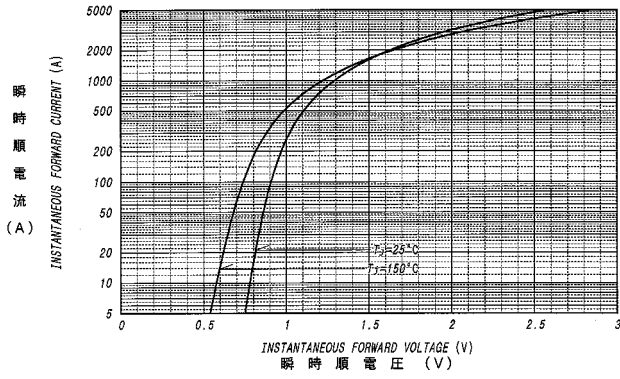
## Electrical • Thermal Characteristics

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	

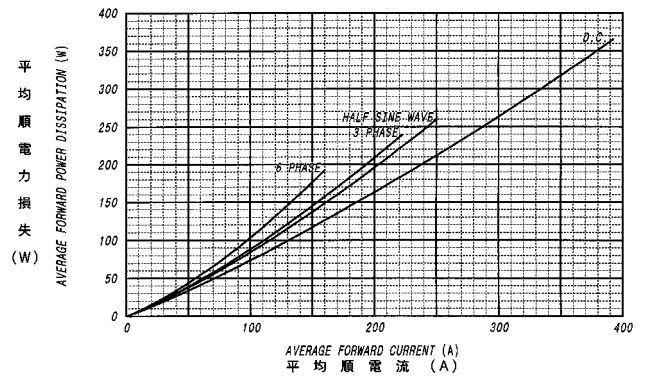
PH250x OUTLINE DRAWING (Dimensions in mm)



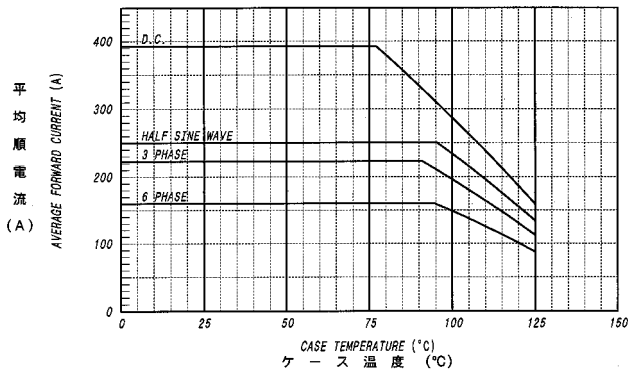
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



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

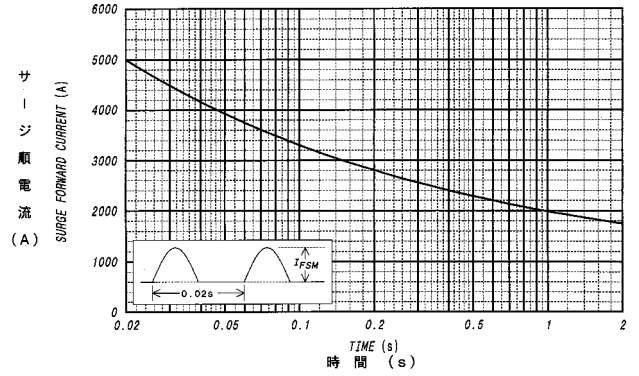


平均順電流 - ケース温度定格  
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格  
SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, Tj=150°C



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

