

DIODE MODULE 150A/300 to 800V PH1503,PH1504,PH1508

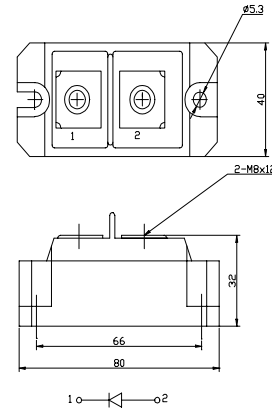
FEATURES

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

TYPICAL APPLICATIONS

- * Rectified For General Use

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:220g

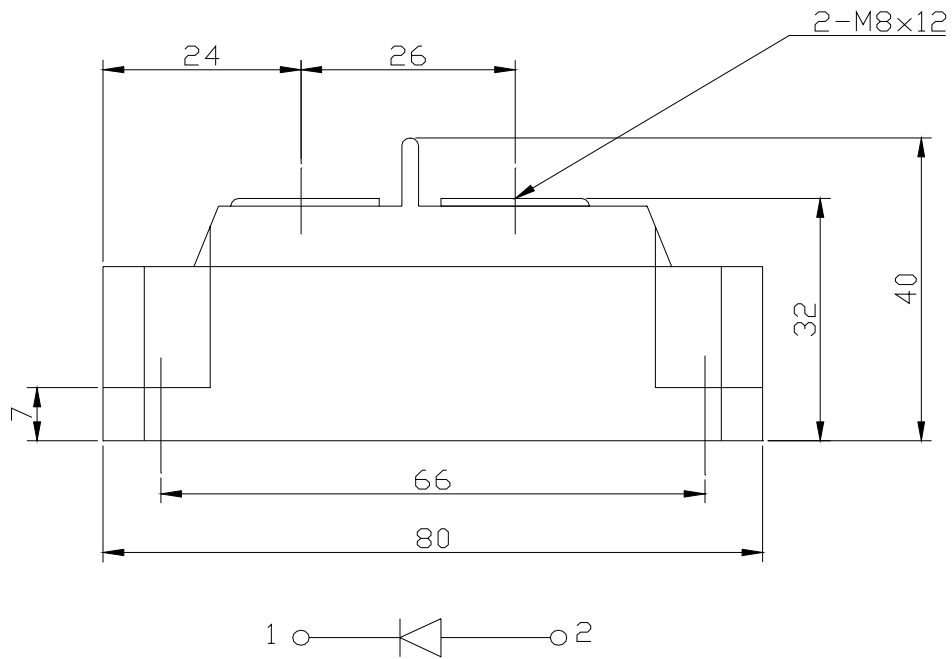
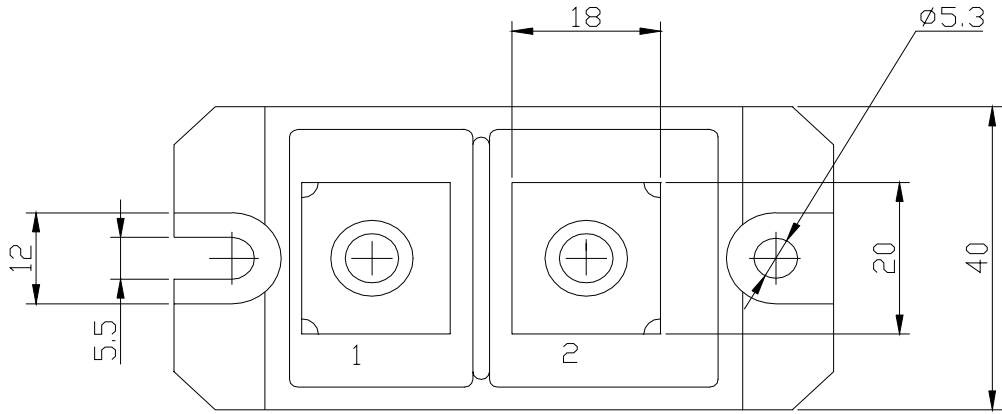
Parameter	Symbol	Type / Grade			Unit
		PH1503	PH1504	PH1508	
Repetitive Peak Reverse Voltage	V_{RRM}	300	400	800	V
Non Repetitive Peak Reverse Voltage	V_{RSM}	400	500	900	

Parameter			Conditions	Max Rated Value	Unit
Average Rectified Output Current		$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=103^{\circ}C$	150	A
RMS Forward Current		$I_{F(RMS)}$		235	A
Surge Forward Current		I_{FSM}	50 Hz Half Sine Wave,1Pulse Non-repetitive	3200	A
I Squared t		I^2t	2msec to 10msec	51200	A ² s
Operating JunctionTemperature 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	M5 Screw	2.4 to 2.8	N.m
	Terminals		M8 Screw	9.0 to 10.0	

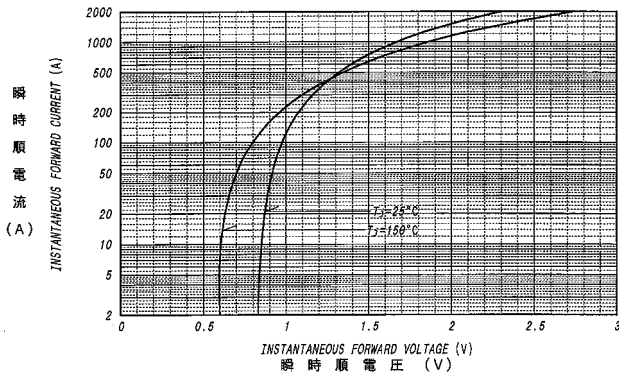
Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current	I_{RM}	$V_{RM}= V_{RRM}, T_j= 150^{\circ}C$	15	mA
Peak Forward Voltage	V_{FM}	$I_{FM}= 450A, T_j=25^{\circ}C$	1.28	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case	0.25	°C/W
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound	0.1	

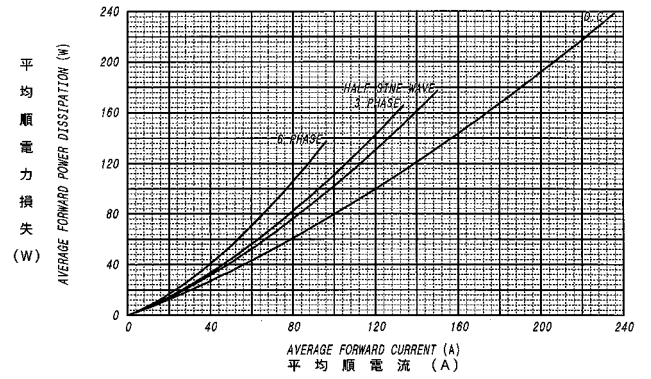
PH150x OUTLINE DRAWING (Dimensions in mm)



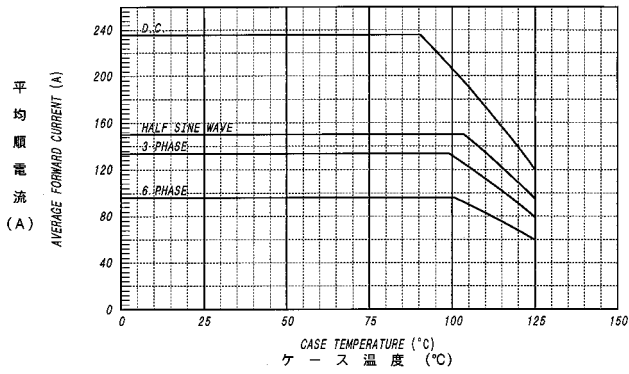
順電圧特性
FORWARD CURRENT VS. VOLTAGE



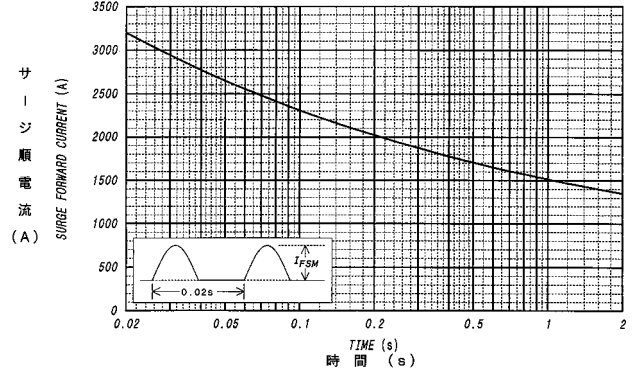
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION



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, $T_j=150^\circ\text{C}$



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

