

# SBD MODULE 80A/100V

# P2H80QH10

## FEATURES

- \* Compatible with Isolated Base SOT227
- \* Dual Separated Diodes
- \* Extremely Low Forward Voltage Drop
- \* Low Power Loss, High Efficiency
- \* High Surge Capability

## OUTLINE DRAWING

See the Next Page

## TYPICAL APPLICATIONS

- \* High Frequency Rectification

## Maximum Ratings

Approx Net Weight:35g

Parameter	Symbol	Type / Grade		Unit
		P2H80QH10	-	
Repetitive Peak Reverse Voltage *1	V <sub>RRM</sub>	100	-	V
Non Repetitive Peak Reverse Voltage *1	V <sub>RSM</sub>	-	-	

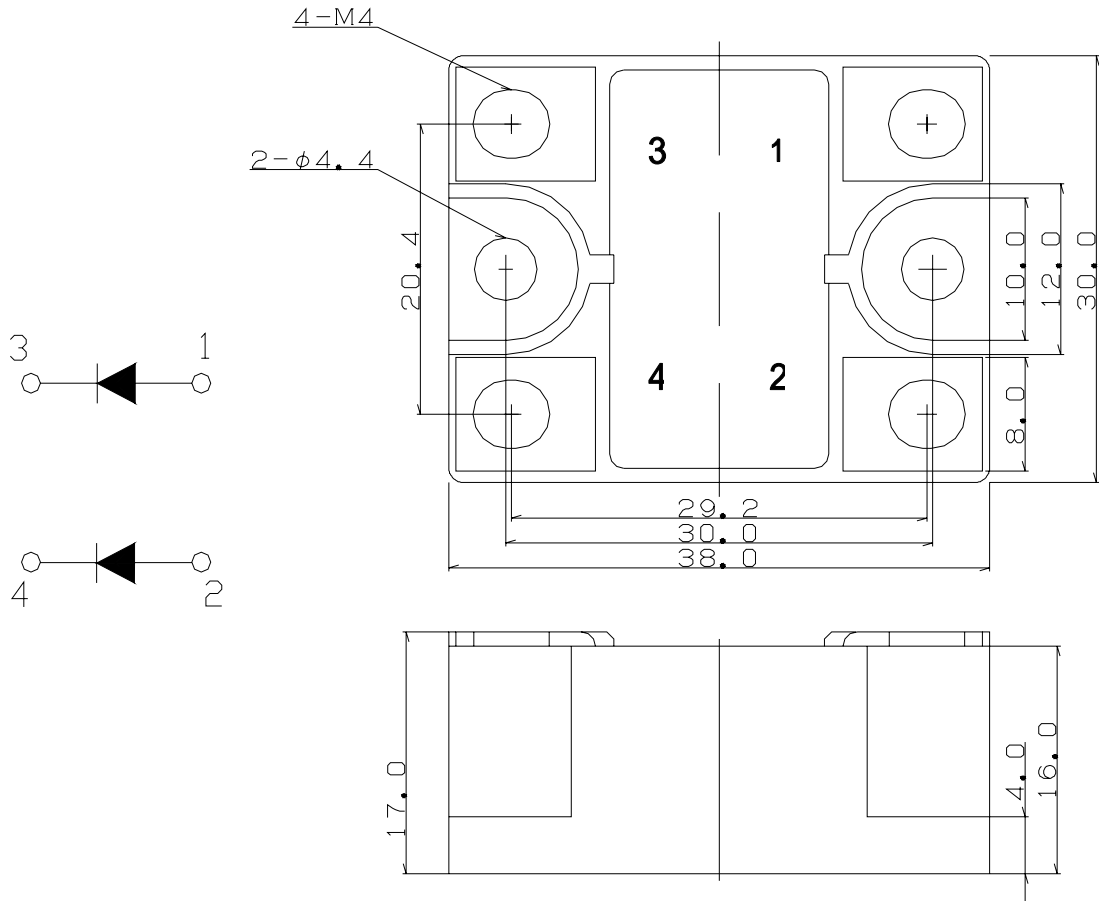
Parameter		Conditions	Max Rated Value	Unit
Average Rectified Output Current *1	I <sub>O(AV)</sub>	50Hz Half Sine Wave condition T <sub>c</sub> =94°C	80	A
Surge Forward Current *1	I <sub>FSM</sub>	50 Hz Half Sine Wave,1Pulse Non-repetitive	400	A
Operating JunctionTemperature Range	T <sub>jw</sub>		-40 to +150	°C
Storage Temperature Range	T <sub>stg</sub>		-40 to +125	°C
Isoration Voltage	V <sub>iso</sub>	Base Plate to Terminals, AC1min	2500	V
Mounting torque	Terminals	M4Screw	1.5(1.4)	N.m
	Case mounting	M4Screw with Thermal Compound	1.5(1.4)	

## Electrical • Thermal Characteristics

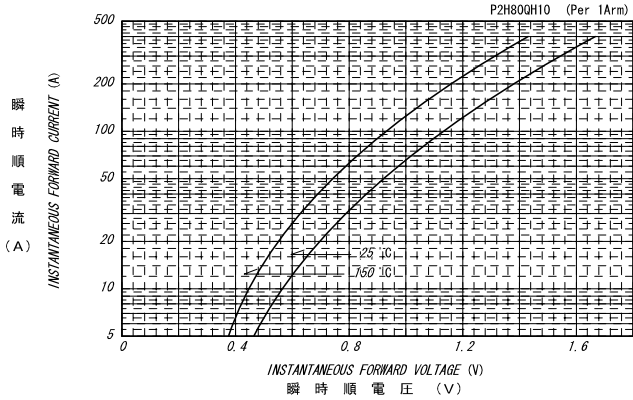
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I <sub>RM</sub>	V <sub>RM</sub> = V <sub>RRM</sub> , T <sub>j</sub> = 25°C	40	μA
Peak Forward Voltage *1	V <sub>FM</sub>	I <sub>FM</sub> = 80A, T <sub>j</sub> =25°C	0.97	V
Thermal Resistance *1	R <sub>th(j-c)</sub>	Junction to Case	0.53	°C/W
	R <sub>th(c-f)</sub>	Base Plate to Heat Sink with Thermal Compound	0.3	

\*1: Value Per 1Arm

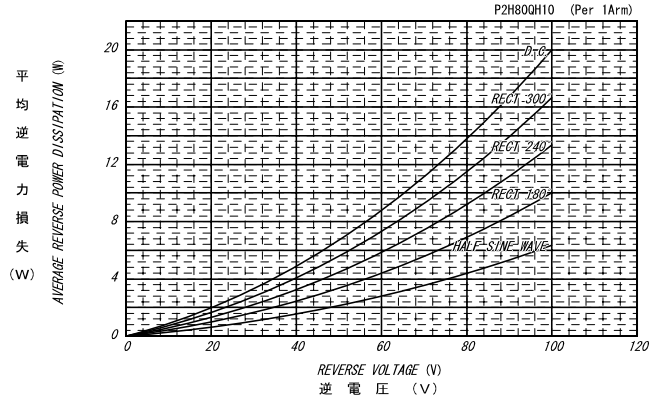
P2H80QH10 OUTLINE DRAWING (Dimensions in mm)



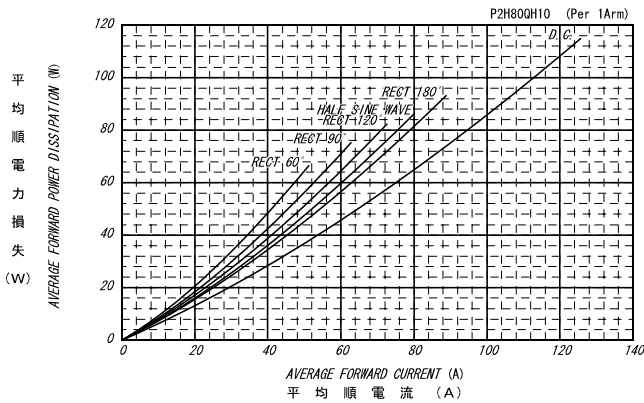
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



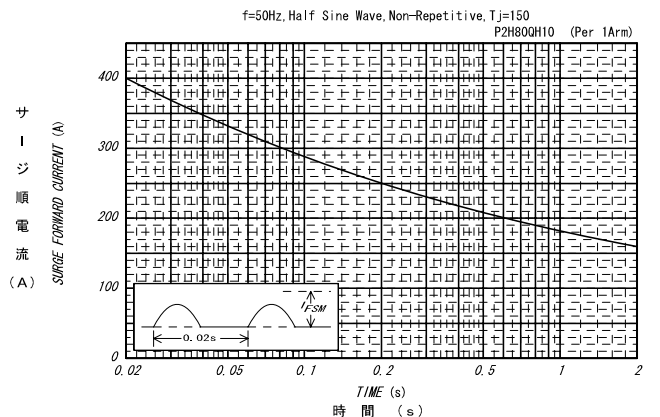
平均逆電力損失  
AVERAGE REVERSE POWER DISSIPATION



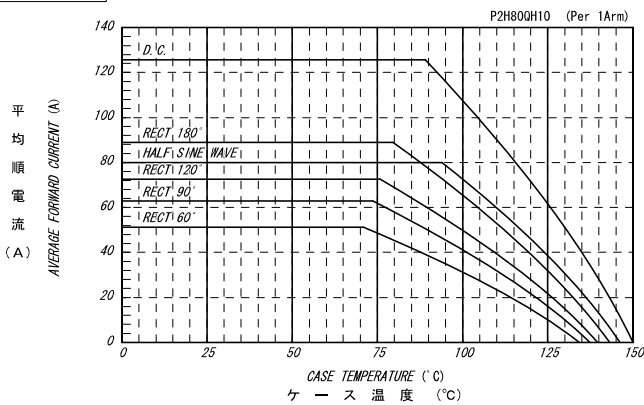
平均順電力損失特性  
AVERAGE FORWARD POWER DISSIPATION



サージ順電流定格  
SURGE CURRENT RATINGS



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



ピーク逆電流 - ピーク逆電圧特性  
PEAK REVERSE CURRENT VS. PEAK REVERSE VOLTAGE

