

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 _{RRM} | 100 | - | V |
| Non Repetitive Peak Reverse Voltage *1 | V _{RSM} | - | - | |

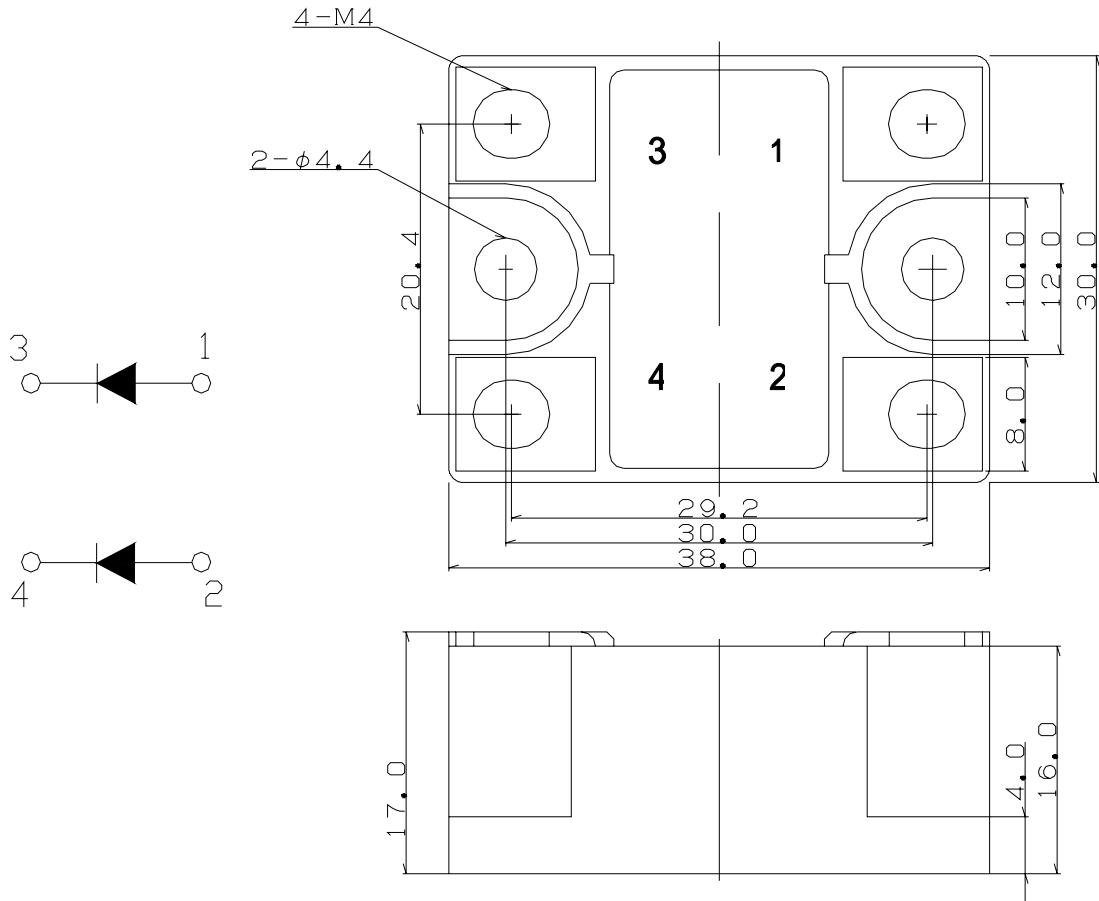
| Parameter | | Conditions | Max Rated Value | Unit |
|--------------------------------------|--------------------|---|-----------------|------|
| Average Rectified Output Current *1 | I _{O(AV)} | 50Hz Half Sine Wave condition T _c =94°C | 80 | A |
| Surge Forward Current *1 | I _{FSM} | 50 Hz Half Sine Wave, 1Pulse Non-repetitive | 400 | A |
| Operating Junction Temperature Range | T _{jw} | | -40 to +150 | °C |
| Storage Temperature Range | T _{stg} | | -40 to +125 | °C |
| Isolation Voltage | V _{iso} | 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

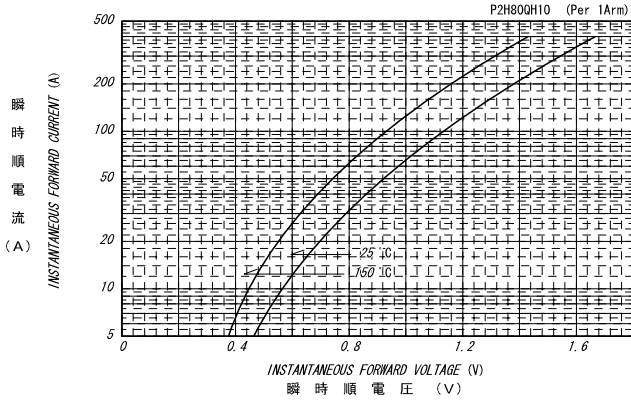
| Characteristics | Symbol | Test Conditions | Max. | Unit |
|-------------------------|----------------------|--|------|------|
| Peak Reverse Current *1 | I _{RM} | V _{RM} = V _{RRM} , T _j = 25°C | 40 | μA |
| Peak Forward Voltage *1 | V _{FM} | I _{FM} = 80A, T _j =25°C | 0.97 | V |
| Thermal Resistance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

*1: Value Per 1Arm

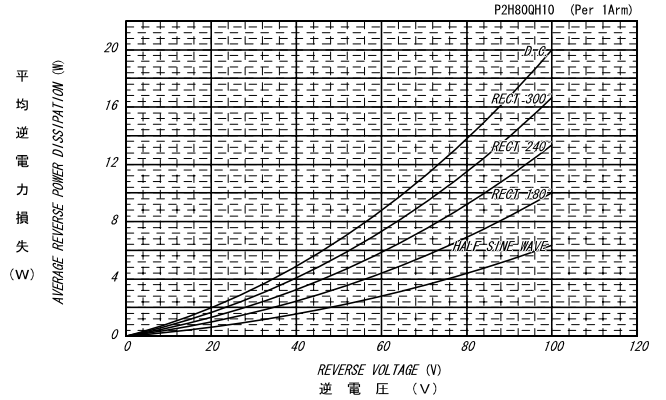
P2H80QH10 OUTLINE DRAWING (Dimensions in mm)



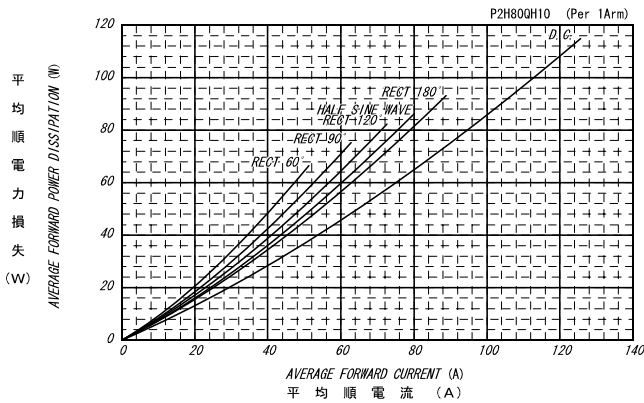
順電圧特性
FORWARD CURRENT VS. VOLTAGE



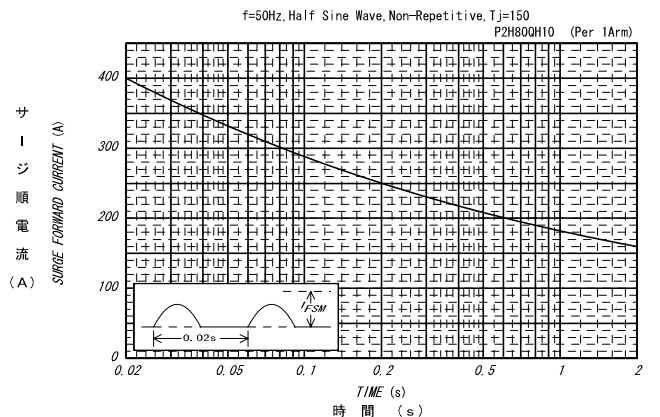
平均逆電力損失
AVERAGE REVERSE POWER DISSIPATION



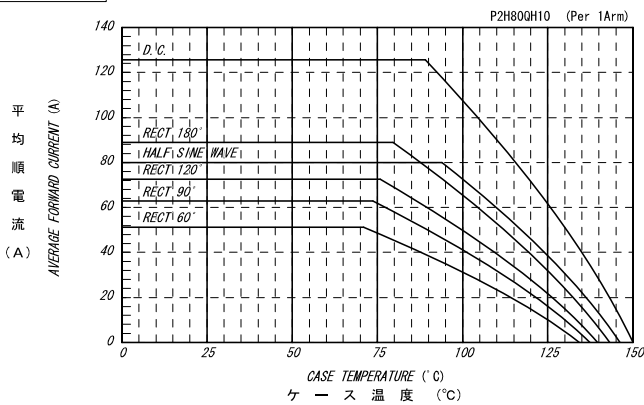
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION



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

