

SBD MODULE 160A/60V

PQ160QH06N

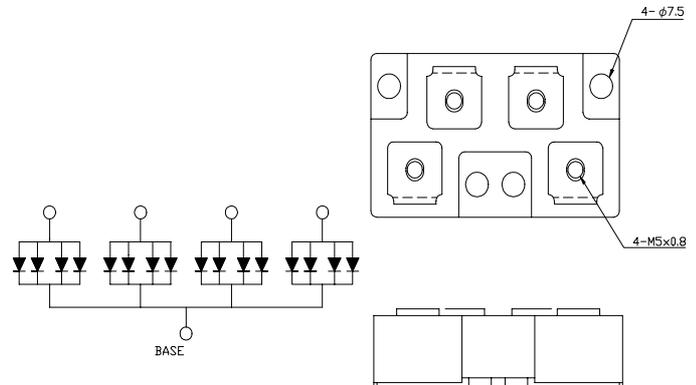
OUTLINE DRAWING

FEATURES

- * Four-Arms, Cathode Common to Base Plate
- * Low Forward Voltage Drop
- * Low Power Loss, High Efficiency
- * High Surge Capability
- * UL Recognized, File No. E187184

TYPICAL APPLICATIONS

- * High Frequency Rectification



Maximum Ratings

Approx Net Weight:250g

| Voltage Rating | Symbol | PQ160QH06N | | Unit |
|---------------------------------------|--------------|--|-------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 60 | | V |
| Repetitive Peak Surge Reverse Voltage | V_{RRSM} | 65 (Pulse Width $\leq 1 \mu\text{sec}$, Duty $\leq 1/50$) | | V |
| Electrical Rating | | Condition | Rating | |
| Average Rectified Output Current | I_o | 50Hz Half Sine Wave, per Arm $T_c=T_l=98^\circ\text{C}$ (T_l =Terminal Temperature) | 160 | A |
| RMS Forward Current | $I_{F(RMS)}$ | Per Arm | 226 | A |
| Surge Forward Current | I_{FSM} | 50 Hz Half Sine Wave, 1cycle Non-repetitive, per Arm | 2800 | A |
| Operating Junction Temperature Range | T_{jw} | | -40 to +150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | | -40 to +125 | $^\circ\text{C}$ |
| Mounting torque | F_{tor} | Case mounting(recommended) | 3.0 | N.m |
| | | Terminal Screw(recommended) | 2.6 | |

Electrical • Thermal Characteristics

| Characteristics | Symbol | Test Conditions | Max. | Unit |
|----------------------|---------------|--|------|--------------------|
| Peak Forward Voltage | V_{FM} | $I_{FM}= 120\text{A}$, $T_j=25^\circ\text{C}$, per Arm | 0.62 | V |
| Peak Reverse Current | I_{RM} | $V_{RM}= V_{RRM}$, $T_j= 150^\circ\text{C}$, per Arm | 1000 | mA |
| Thermal Resistance | $R_{th(j-c)}$ | Junction to Case, per Arm | 0.34 | $^\circ\text{C/W}$ |
| | $R_{th(c-f)}$ | Base Plate to Heat Sink with Thermal Compound | 0.03 | |

We recommend the use of the electrical conductive grease.

In case of parallel use, consider in balance of the current of each arms.

Terminal Temperature must be less than T_c . (ex. Cooled by air blow)

PQ160QH06N OUTLINE DRAWING (Dimensions in mm)

