

SBD MODULE 60A/30V

PC60QL03N

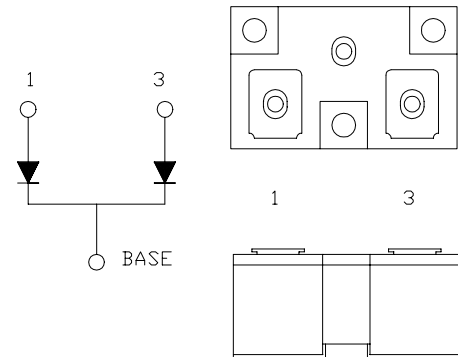
OUTLINE DRAWING

FEATURES

- * Dual-Cathode Common to Base Plate
- * Extremely 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:65g

| Voltage Rating | Symbol | PC60QL03N | | Unit |
|---------------------------------------|--------------|---|-------------|------------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 30 | | V |
| Repetitive Peak Surge Reverse Voltage | V_{RRSM} | 35 (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, $T_c=92^\circ\text{C}$ | 60 | A |
| RMS Forward Current | $I_{F(RMS)}$ | Per Arm | 94 | A |
| Surge Forward Current | I_{FSM} | 50 Hz Half Sine Wave, 1cycle Non-repetitive, per Arm | 800 | A |
| Operating Junction Temperature Range | T_{jw} | | -40 to +125 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | | -40 to +125 | $^\circ\text{C}$ |
| Mounting torque | F_{tor} | Case mounting(recommended) | 1.45 | N.m |
| | | Terminal Screw(recommended) | 1.45 | |

Electrical • Thermal Characteristics

| Characteristics | Symbol | Test Conditions | Max. | Unit |
|----------------------|---------------|---|------|--------------------|
| Peak Forward Voltage | V_{FM} | $I_{FM}= 60\text{A}$, $T_j=25^\circ\text{C}$, per Arm | 0.50 | V |
| Peak Reverse Current | I_{RM} | $V_{RM}= V_{RRM}$, $T_j= 25^\circ\text{C}$, per Arm | 80 | mA |
| Thermal Resistance | $R_{th(j-c)}$ | Junction to Case, per Arm | 0.74 | $^\circ\text{C/W}$ |
| | $R_{th(c-f)}$ | Base Plate to Heat Sink with Thermal Compound | 0.12 | |

We recommend the use of the electrical conductive grease.

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

PC60QL03N OUTLINE DRAWING (Dimensions in mm)

