

SBD MODULE 160A/40V

PQ160QH04N

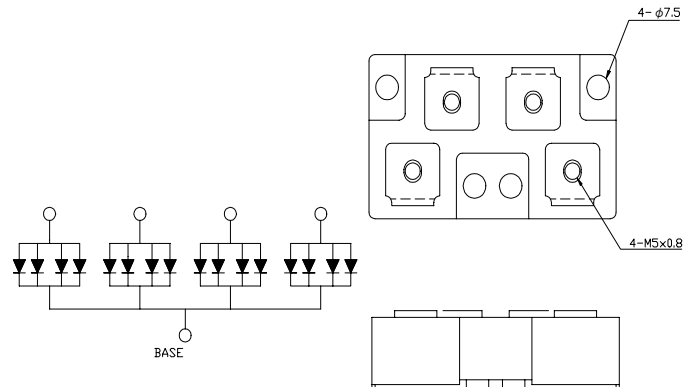
OUTLINE DRAWING

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	PQ160QH04N		Unit
Repetitive Peak Reverse Voltage	V_{RRM}	40		V
Repetitive Peak Surge Reverse Voltage	V_{RRSM}	45 (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 $T_c=T_l=102^\circ\text{C}$ (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	0.58	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)

PQ160QH04N OUTLINE DRAWING (Dimensions in mm)

