SBD MODULE 160A/40V

PQ160QH04N

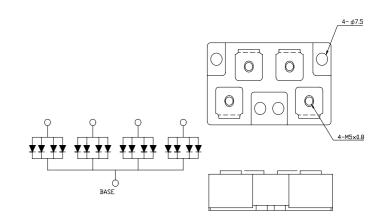
OUTLINE DRAWING

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 ≤ 1 μsec, Duty ≤1/50)		V
Electrical Rating		Condition	Rating	
Average Rectified Output Current	Io	50Hz Half Sine Wave, per Arm Tc=Tl=102°C (Tl=Terminal Temperature)	160	A
RMS Forward Current	I _{F(RMS)}	Per Arm	226	Α
Surge Forward Current	I _{FSM}	50 Hz Half Sine Wave,1cycle Non-repetitive, per Arm	2800	A
Operating JunctionTemperature Range	Tjw		-40 to +150	$^{\circ}C$
Storage Temperature Range	Tstg		-40 to +125	°C
Mounting torque	Ftor	Case mounting(recommended) Terminal Screw(recommended)	3.0 2.6	N•m

Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit	
Peak Forward Voltage	V_{FM}	I _{FM} = 120A, Tj=25°C, per Arm	0.58	V	
Peak Reverse Current	I_{RM}	V _{RM} = V _{RRM} , Tj= 150°C, per Arm	1000	mA	
Thermal Resistance	Rth(j-c)	Junction to Case, per Arm	0.34	l	
	Rth(c-f)	Base Plate to Heat Sink with Thermal Compound	0.03	°C/W	
		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 Tc. (ex. Cooled by air blow)

Nihon Inter Electronics Corporation

PQ160QH04N OUTLINE DRAWING (Dimensions in mm)

