SBD MODULE 80A/40V

PE80Q04N

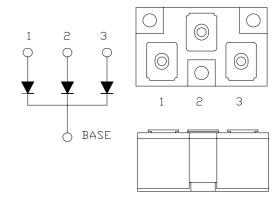
OUTLINE DRAWING

FEATURES

- * Three-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:65g

Voltage Rating	Symbol	PE80Q04N		Unit
Repetitive Peak Reverse Voltage	Vrrm	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=96°C	80	Α
RMS Forward Current	I _F (RMS)	Per Arm	125	A
Surge Forward Current	I_{FSM}	50 Hz Half Sine Wave,1cycle Non-repetitive, per Arm	1600	Α
Operating JunctionTemperature Range	Tjw		-40 to +125	°C
Storage Temperature Range	Tstg		-40 to +125	°C
Mounting torque	Ftor	Case mounting(recommended) Terminal Screw(recommended)	1.45 1.45	N•m

Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit	
Peak Forward Voltage	$V_{\rm FM}$	I _{FM} = 80A, Tj=25°C, per Arm	0.52	V	
Peak Reverse Current	I_{RM}	V _{RM} = V _{RRM} , Tj= 25°C, per Arm	80	mA	
Thermal Resistance		Junction to Case, per Arm	0.46	°C/W	
	Rth(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.

Nihon Inter Electronics Corporation

PE80Q04N OUTLINE DRAWING (Dimensions in mm)

