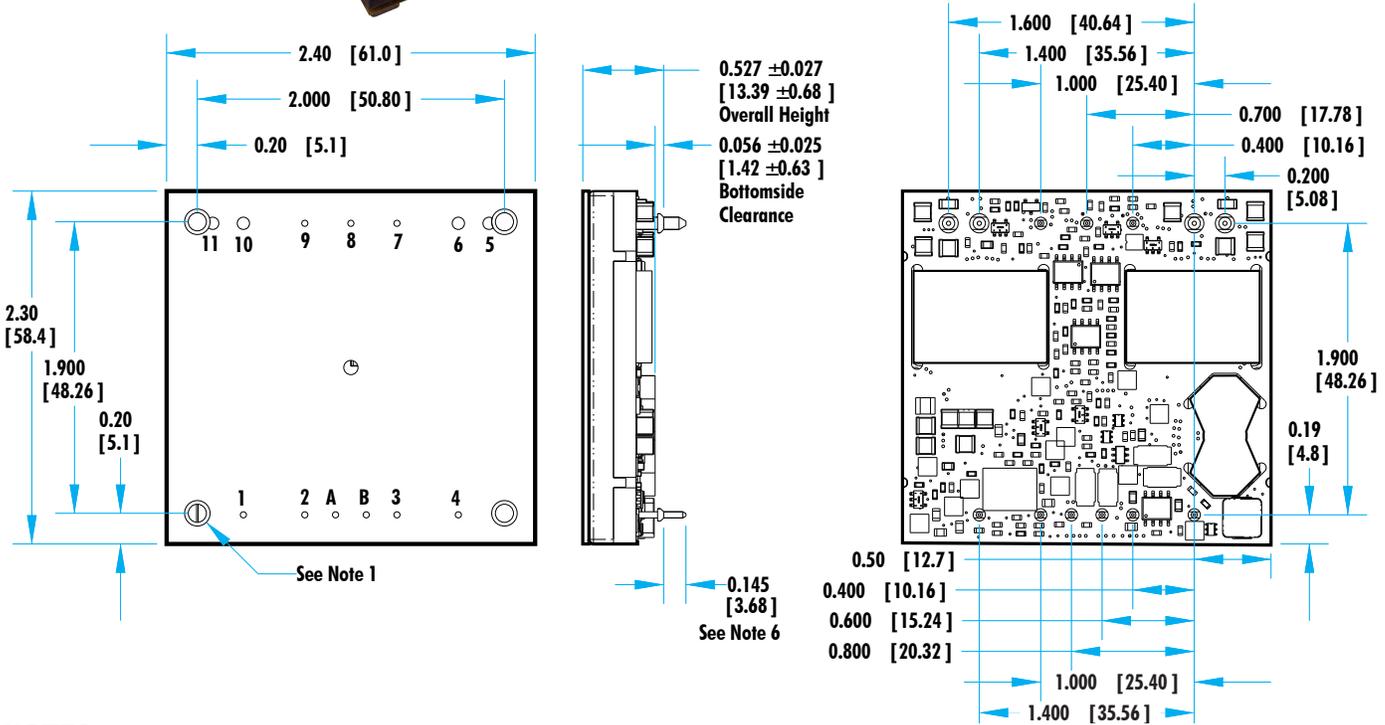


High Efficiency, Isolated DC/DC Converter, with Baseplate



This technical addendum contains additional specifications for the baseplated version of the PowerQor® Peta half-brick series of converters. This unit is manufactured by adding an industry standard size baseplate to the non-baseplated half-brick converter using standard mounting techniques. The baseplated version allows for optional heatsinking in severe thermal environments or for mounting to a cold plate. Please refer to the HPAxx specification sheets for all specifications that are not included in this addendum.



NOTES

- M3 screws used must not exceed .085" (2.16mm) depth below the surface of the base plate
- Applied torque per screw shall not exceed 6 IN-LB (0.68Nm)
- Base plate flatness tolerance is .004" (.10mm) TIR for surface
- Pins 1, 2, 4, & 6 - 8 are 0.040" (1.02mm) Dia. with 0.080" (2.03mm) Dia. Standoff shoulders
- Pins 5 & 9 are 0.080" (2.03mm) Dia. with 0.125" (3.18mm) Dia. Standoff shoulders
- Other pin extension lengths available.
- All Pins: Material - Copper Alloy
Finish (RoHS 6/6) - Matte Tin over Nickel plate
- Undimensioned components are shown for visual reference only.
- All dimensions in inches (mm)
Tolerances: x.xx +/-0.02 in. (x.x +/-0.5mm)
x.xxx +/-0.010 in. (x.xx +/-0.25mm)
- Weight: 3.94 oz (111.6 g) typical

Pins A, B and 3 are optional and only included in full feature versions of the 1.2V - 1.8V modules. Pins 5 and 11 are only included in 3.3V or lower units.

SPECIFICATIONS (that differ from HPAxx specs)

Weight: 3.94 oz (111.8 g) typical

Maximum Baseplate

Temperature Limit: 100°C

All other specifications are identical to non-baseplated PowerQor converters of equivalent input voltage, output voltage and output current.

High Efficiency, Isolated DC/DC Converter, with Baseplate

Attaching Heatsinks

Follow the guidelines given below when attaching a heatsink to a PowerQor converter with baseplate.

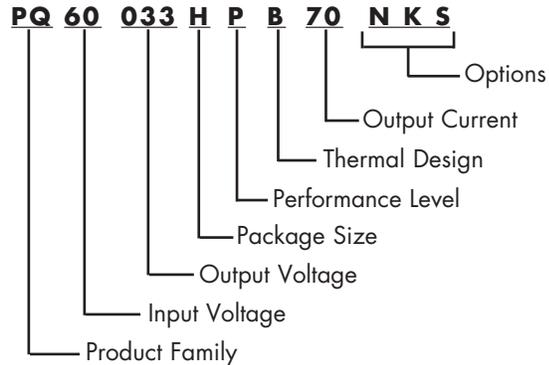
1) A thermal interface material is required to assure proper heat transfer from the baseplate to the heatsink. Thermal grease may be used, or materials such as Thermalloy's Grafoil or Bergquist's HiFlow and SoftFace. Other similar products are available from many heatsink manufacturers.

2) Use four M3 threaded machine screws for attachment. The length of the screw will depend on the thickness of the heatsink baseplate. The maximum permissible screw length below the top surface of the baseplate is not to exceed 2.16mm (0.085") in order to prevent damage to any internal components. A recommended minimum screw length to ensure sufficient hold to the baseplate is 2.54mm (0.10").

3) The screws should be tightened with a torque suitable to get a tight fitting of the heatsink against the thermal interface material and the baseplate. The applied torque per screw should not exceed 6 in-lb (0.68 Nm).

PART NUMBERING SYSTEM

The part numbering system for SynQor's PowerQor DC/DC converters follows the format shown in the example below. For a complete listing of available part numbers, please refer to the SynQor web site.



The first 12 characters comprise the base part number and the last 3 characters indicate available options.

Selected PowerQor modules are available with a baseplate. Before ordering baseplated modules, one should consult the factory to ensure that the specific product is available in a baseplated version. The half-brick family of single output converters that have a baseplate should be designated with the letter "B" as the 10th character in the full 15 character part number. The other characters in the part number would follow the same format as a non-baseplated unit to indicate the desired input and output voltage, package size, performance level, rated current, enable logic, pin length and feature set.

When ordering SynQor converters, please ensure that you use the complete 15 character part number.

Contact SynQor for further information and to order:

Phone: 978-849-0600
Toll Free: 888-567-9596
Fax: 978-849-0602
E-mail: power@synqor.com
Web: www.synqor.com
Address: 155 Swanson Road
 Boxborough, MA 01719
 USA

PATENTS

SynQor holds numerous U.S. patents, one or more of which apply to most of its power converter products. Any that apply to the product(s) listed in this document are identified by markings on the product(s) or on internal components of the product(s) in accordance with U.S. patent laws. SynQor's patents include the following:

5,999,417	6,222,742	6,545,890	6,594,159	6,731,520	6,894,468
6,896,526	6,927,987	7,050,309	7,072,190	7,085,146	7,119,524
7,269,034	7,272,021	7,272,023	7,558,083	7,564,702	7,765,687
7,787,261	8,023,290	8,149,597	8,493,751	8,644,027	9,143,042

WARRANTY

SynQor offers a three (3) year limited warranty. Complete warranty information is listed on our website or is available upon request from SynQor.