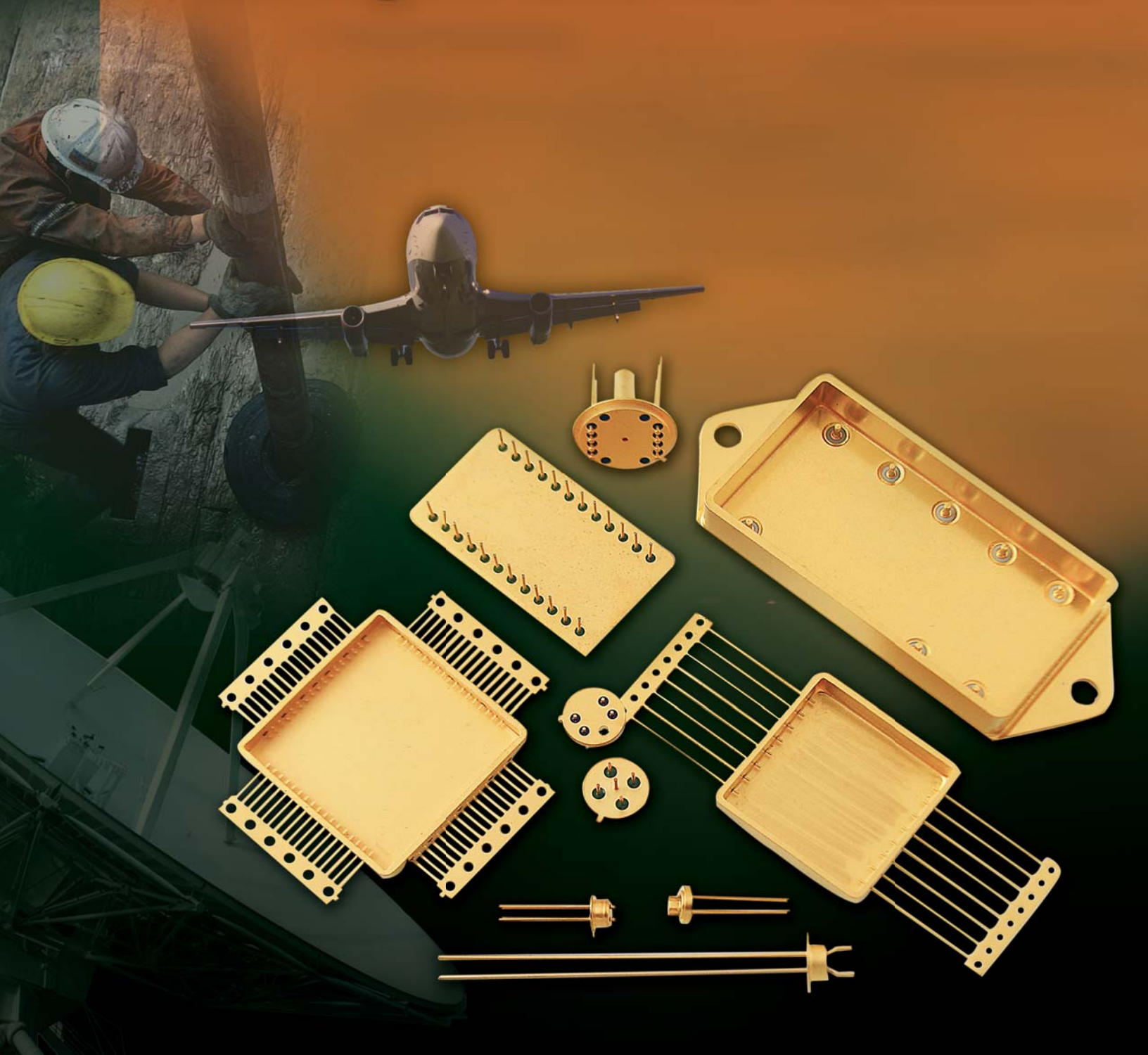




GLASSEAL
PRODUCTS™

AMETEK®
HCC INDUSTRIES

Hybrid Micro-Electronic Packages and TO Headers



Capability Information

- ▲ Sealing glass to metal for over 50 years, Glasseal Products, Inc (GSP) is one of the most versatile manufacturers of hermetically sealed interconnection and microelectronic packaging components in business today. As a business unit of AMETEK HCC Industries, GSP has a broad portfolio of connectors, headers, feed thru's, end seals and packages in both glass and ceramic configurations. We manufacture both standard MIL Spec products and customized designs to your drawings and technical requirements

Products

- ▲ Circular connectors
- ▲ Rectangular connectors
- ▲ DC and RF Feed thru's
- ▲ Battery and Capacitor end seals
- ▲ TO Headers, flat-packs, plug-ins, and platforms
- ▲ Complex machined housings for Opto-electronic, Micro-electronic and Microwave assemblies
- ▲ Thermal management solutions

How

- ▲ Design expertise and modeling capabilities
 - ✓ Mechanical, electrical and thermal
- ▲ Experienced design and process engineers
- ▲ Responsive Sales and Customer Service representatives
- ▲ High temperature brazing and glass-sealing furnaces
- ▲ Low temperature braze integration furnaces
- ▲ Chemical cleaning facility
- ▲ On-site plating shop
- ▲ Inspection and testing facilities
- ▲ Quality system registered to ISO 9001:2000 and AS9100:2004
- ▲ Access to global supply base
- ▲ 50,000 sq ft facility.
- ▲ Forward looking business plan

Glasseal Products (GSP) manufactures a full range of standard outline hybrid micro-electronic packages and Transistor Outline (TO) headers.

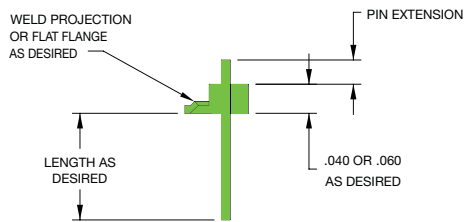
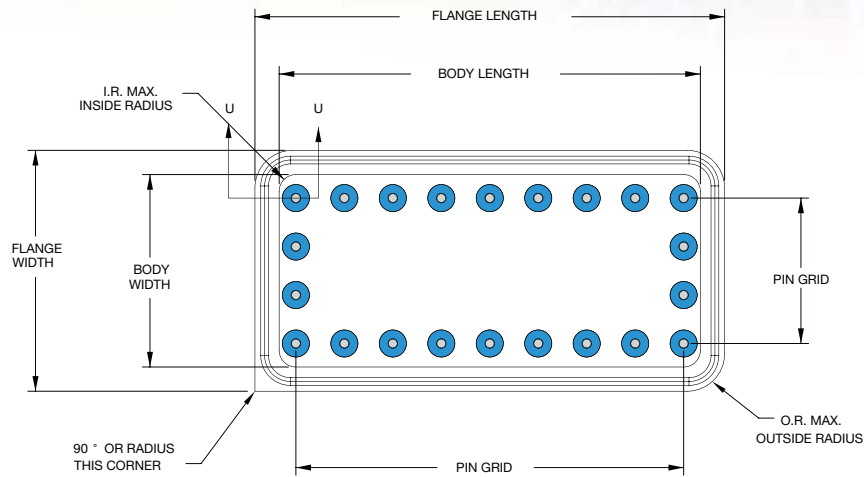
GSP has open tooling for many sizes of hermetically sealed flat-packs (butterfly packages), platforms (dual in-line), plug-ins and TOs. In addition, we offer customized features in the form of ground pins, glass stand-offs, identification beads, threaded hardware and pin termination types. We also offer customized options on the design of the housings in the form of two piece construction flat-packs, which allow a design engineer to specify a base with mounting features and/or a base made from a thermal management material such as Copper-Tungsten or Copper-Molybdenum to dissipate heat from a power product.

GSP's packages and TOs are designed for use in demanding environments and will withstand the rigors of assembly into a wide variety of electronic products. The end uses are as diverse as telecommunications instruments, infrared & x-ray detectors, defense & aerospace systems and down-hole oil and gas logging tools where the glass-to-metal seals are required to maintain an ultra high-level of Hermeticity over periods of time often measured in decades.

This data sheet provides a starting point for your product design and illustrates the many options available to suit your assembly and functional needs. GSP has an extensive design library that includes many sizes of packages and TOs and we invite you to contact our customer service representatives to explore off-the-shelf design solutions or customized needs.

Electrical and environmental performance data of our finished products is available upon request.

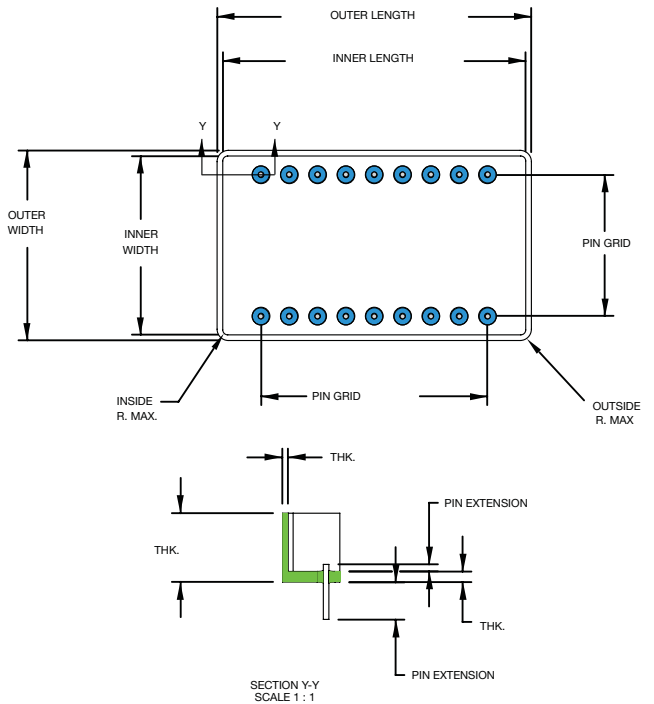
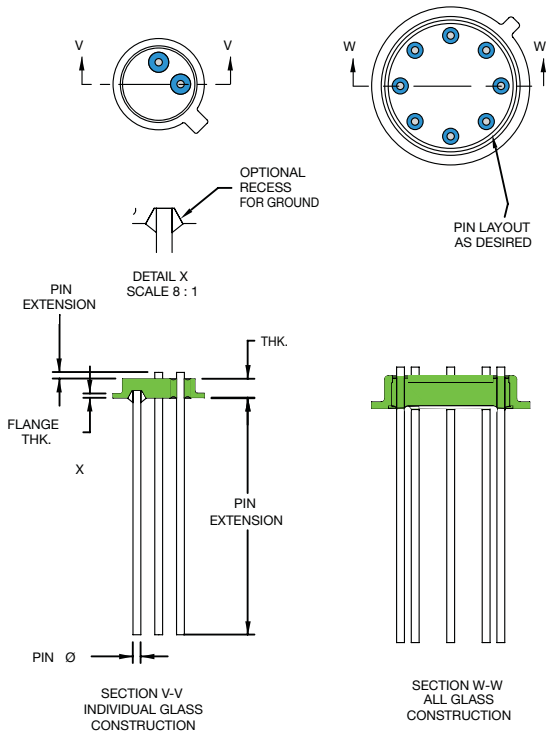
Platform Package



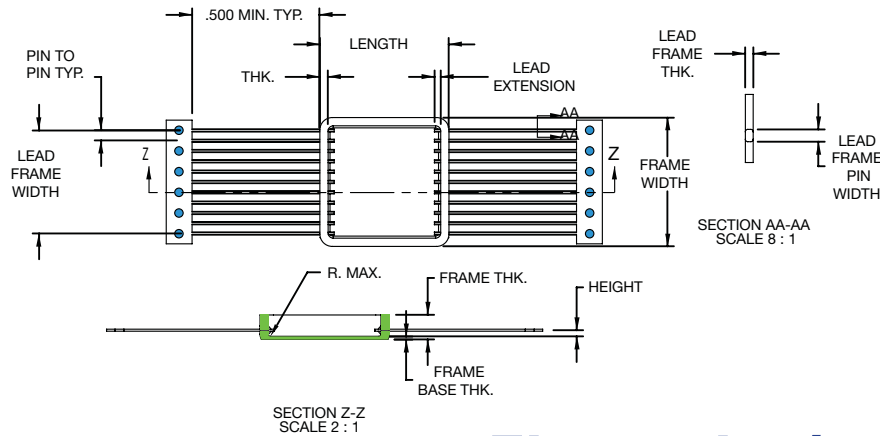
SECTION U-U

TO Headers

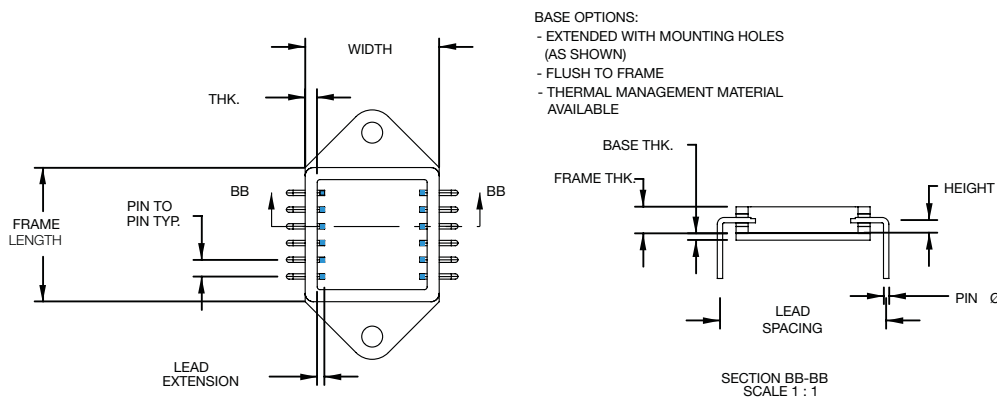
Uni-Body Plug In



Flatpacks



Flatpacks (2 piece)



About Glasseal Products

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HCC INDUSTRIES

Glasseal Products, Inc.
 485 Oberlin Avenue • Lakewood, NJ 08701 • USA
 TEL: 732-370-9100 • FAX: 732-370-7107
www.hccindustries.com

and in Europe:

HCC Industries International
 49-53 Hazelwood Road • Northampton, NN1 1LG • UK
 TEL: +44 (0) 1604 233101 • FAX: +44 (0) 1604 232907
www.hccindustries.com

and in Asia:

AMETEK Shanghai (SPL)
 Room 912 • Metro Tower • NO 30 • Tian Yao Qiao Road
 Shanghai • China 200020
 TEL: + (86) 21 6426 8111 x36 • FAX: + (86) 21 6426 7818
www.hccindustries.com