



Materion Visi-Lids™ were created to meet your requirement for an optical cover lid. They are the first commercially available optical hermetic lid and represent our leading-edge solution to your packaging challenge.

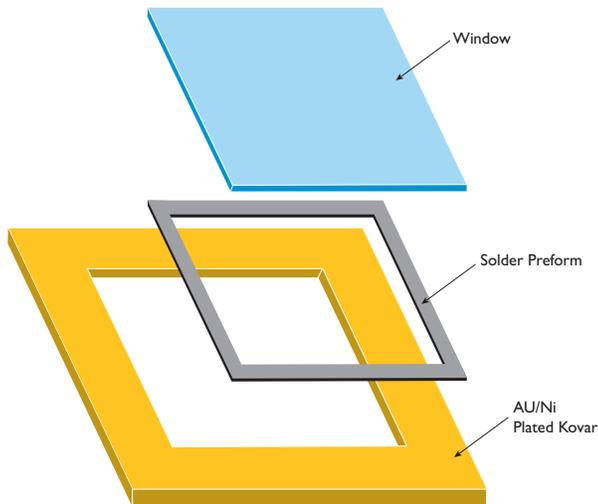
Visi-Lids™

Materion Visi-Lids™ are the first commercially available hermetic optical cover lid assembly.

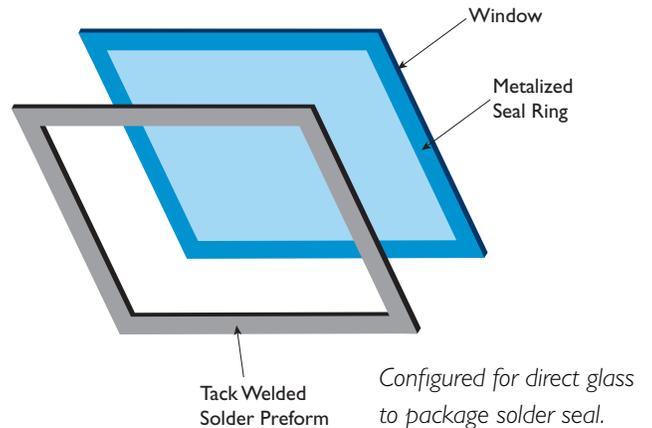
Visi-Lid™ Optical Assembly

Visi-Lid™, an optical assembly, passes light at specified wavelengths. In its simplest form, the assembly consists of an A/R coated and glass metalized window of sapphire, silicon or germanium with a solder frame tack welded to the metalized portion.

More complex assemblies require the metalized windows to be sealed to a plated Kovar frame, with either a solder preform being tack welded to the Kovar frames or left bare for seam sealing. These assemblies hermetically seal various device packages.



Glass inset on plated Kovar frame, configured for seam welding.



Window Materials

Window substrates suitable for infrared, ultraviolet, and visible light applications are available. Typical materials for windows include Sapphire, Germanium, and Silicon. Other materials are available.

Anti-Reflective Coatings

Single layer or multi-layer material systems can be custom designed to meet customer transmission requirements. Visible light, ultraviolet, and infrared coatings are available.

Select Solders

Materion is an industry leader in developing and manufacturing solder alloys for optoelectronic applications. Typical materials include:

- 80Au 20Sn (liquidus: 280, solidus: 280)
- 86Pb 8Bi 4Sn 1Ag 1In (liquidus: 280, solidus: 250)
- 95.5Sn 3.8Ag .7 Cu (liquidus: 217, solidus: 217)
- 90Sn 10Au (liquidus: 217, solidus: 217)

Visi-Lid™ benefits include:

- Complete packaging solution
- In-house design and manufacturing capabilities
- Extensive knowledge of solder sealing systems and assembly
- Engineering support from design through final assembly

MATERION...

Smarter Solutions, Simplified Support and Stronger Relationships

Materion is a global advanced materials company, dedicated to providing solutions that enable our customers' technologies and drive their growth. Our products include precious and non-precious specialty metals, precision optical filters, inorganic chemicals and powders, specialty coatings, specialty-engineered beryllium alloys, beryllium and beryllium composites, and engineered clad and plated metal systems. The Materion business is structured to enhance our ability to provide customers with innovative, best total-cost solutions.

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