

HIGH PERFORMANCE HERMETIC OPTICAL WINDOWS

Metal Injection Molded Materials – Coupled with Superior Glass Sealing Processes – Deliver Revolutionary Results

The use of custom blended metal injection molding (MIM) alloys and a unique approach to glass sealing allow Tekna Seal to use high optical quality glass materials to achieve the highest performance available.



Using (MIM) technology we tailor the thermal expansion properties of the metal frame to match the coefficient of expansion of the desired glass, and then use the Tekna Seal Oxide-Free glass sealing process to form a rugged and stress-free glass-to-metal bond.

Tekna Seal has the knowledge and experience to assist in your effort to realize the best results in a custom made hermetic window designed to weld into your device package.

Benefits of the Tekna Seal Process for Hermetically Sealed Optical Windows:

- Ability to use a wide variety of optical glasses providing high transmittance and freedom from bubbles and inclusions.
- Highest levels of hermeticity far surpassing frit sealed windows and adhesive bonded windows provide the longest life for the packaged optical devices.
- No opportunity for hazing of the window due to outgassing of bonding adhesives
- Elimination of the metallization required for solder or braze-bonded windows.
- Post-sealing optical processing for best optical properties.
- Stress free window assemblies for lowest birefringence.
- Cost savings in moderate to high volume production.

**Contact Tekna Seal today
to find out more about
about advanced hermetic
window technology!**

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