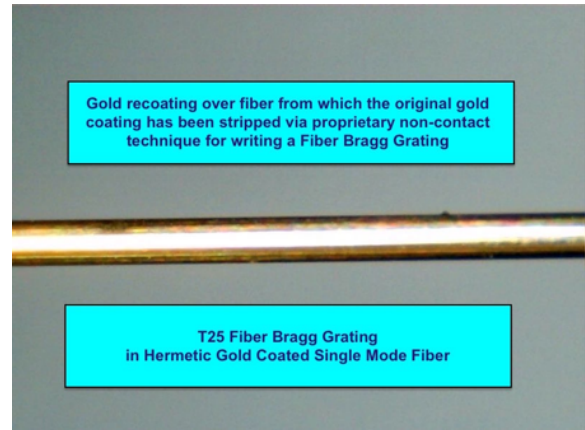


Description

The T25 is a Hermetically Sealed Fiber Bragg Grating (FBG) written in Single-Mode (SM) Gold Coated Fiber.

Available in a wide range of optical specifications. Standard operation to 300°C. Also available with high-temperature annealing to 1,100°C for operation to 1,000°C (see T98 and T160). Naturally packaged (written) directly in fiber, these sensors can be used as they are or they can be packaged into a variety of higher level sensors for use in optical sensing systems using well established metal-to-metal bonding techniques. Small-size and fast response time. Excellent wavelength to temperature linearity. The T25 FBG handling and installation is fast, easy and intuitive. Delivers the advantages inherent to FBG based sensors.

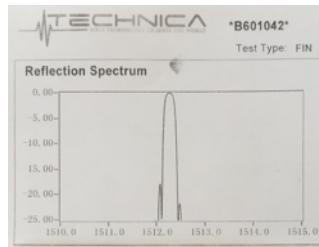
T25 series FBGs are fabricated using licensed and proprietary state-of-the-art laser manufacturing technologies to fit a wide range of field applications. Mass manufactured and commercially available with standard lead-time.



FBGs manufactured and sold by Technica under United Technologies Corp International License

Key Features

Temperature linearity. The precision made FBG structure written into the fibers' core for producing the T25 yields a simple transducer configuration of high resolution, linearity, and measurement repeatability. High SLSR and customer specified BW for clear signal processing.



Designed for applications where hermetic sealing and/or metal-to-metal bonding is required. Factory processed to allow mounting and bonding to be applied on virgin or recoated areas of the fiber. Not susceptible to the effects of humidity. Well fit for optical systems operating in environments that require immunity to humidity, and/or strong bonding to other materials.

Packaging and protection options. The FBG element within the T25 sensor is available coated with gold or can be left uncoated, as the application requires. Options available for ideally balancing cost by pig-tailing the component with other types of fibers (acrylate coated, polyimide coated) for further increasing the envelope of addressable commercial solutions. Premium performance and reliability.

Available as single point sensor or as multi sensor array. For measuring a single point or many. The T25 can be provided in arrays of various lengths with a flexible number of FBGs.

Ready for OEM designs. The T25 FBG is a core sensing element that can be used AS IS or can be further packaged into higher level sensors. Inquire with us about OEM packaging.

Parameter	Specifications
Wavelengths / Tolerance	1460 to 1620 nm, +/-0.5 nm; 980, 1060, 1310 nm, other
Reflection BW (FWHM)	0.1 nm to 2.0 nm; other opt.
Reflectivity %	>70 typical, 1% to 95% avail.
FBG Length	10mm typical, 1 - 24 mm avail.
SLSR	15 dB; other options
Response Time	1 ms
Temperature	-40°C to +300°C See T98 for T to +1,000°C Inquire for cryogenic T to -269°C
Fiber Type and Coating	Single Mode / Gold Coating
Sensor Configurations	Single-Ended, Double-Ended, or Multi-Sensor Array
Fiber Bend Radius	> 17 mm, other options
Fiber Pigtail Length	1 m, other options
Fiber Pigtail Splice Transitions	Available upon request to most fibers
Optical Connector	FC/APC, LC/APC, SC/APC, ST/APC, E-2000, or custom

Applications in Materials and Equipment Test Labs, Aviation, Energy, Industrial, and Research

Technica undertakes a rigorous development process before products release. The company is also firmly committed to continuous improvements after release to insure performance to the highest standards, hence, specifications are subject to update without notice.

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