

Description

The T40 FBGs for Wavelength Division Multiplexing (WDM) systems are available in single or array configurations.

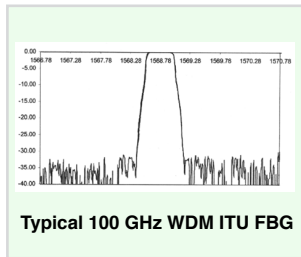
With the emergence of WDM systems, high channel isolation is necessary for avoiding adjacent channel crosstalk. We offer premium grade reflection filters based on Bragg gratings featuring a flat-top response and steep spectral roll-down.

The T40 family of FBGs is commonly used in UDWDM, DWDM, and WDM systems as well as in various Optical Add/Drop Multiplexer (OADM) Modules that are typically a part of such systems. FBG applications include in-fiber narrow band signal filtering, ASE filtering, and wavelength merging or blocking for multiplexing or demultiplexing the desired WDM channels.

These FBG elements are manufactured under tight process control and are tested with our state-of-the-art equipment to serve as highly accurate and reliable wavelength conditioning and selection devices. The FBG specifications listed herein represent the most popular configurations. Many optical and physical variations have been produced and readily available.

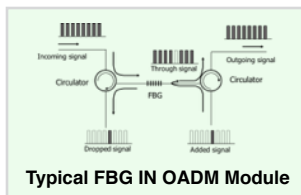
Key Features

Excellent wavelength control. Our T40 line of WDM FBGs is made by using our wide collection of phase masks to ensure excellent accuracy and repeatability during volume production as well as for making research type runs. Phase mask technology is the process of choice when ultimate intrinsic repeatability is required.

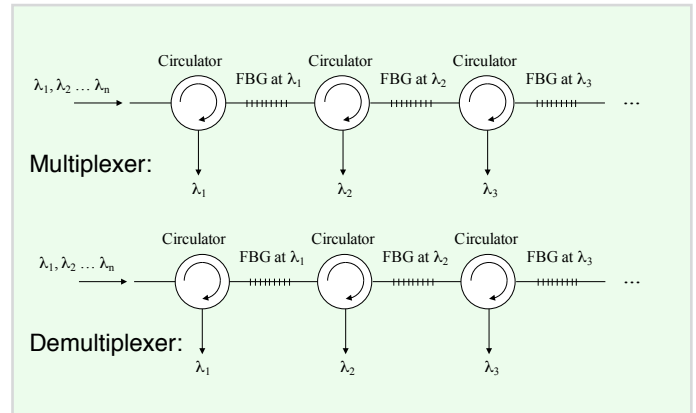


High side lobe suppression ratio (SLSR). The T40 is produced using high-accuracy feedback control so that each grating is ideally exposed for yielding the required specifications.

Telcordia and ROHS compliant. Designed to be a reliable plug-in component for WDM systems. Whether it is deployed as channel selective element in system MUX, DEMUX, or OADM module (picture), the T40 shines in quality and specs.



Field proven, low cost, and long lifetime component. The T40 series of FBGs are designed as a core element for telecom, sensing, measurement instrumentation, and research environments that require both the availability of low-cost FBGs in volume and stable operation for highly accurate functionality over the long-term. The T40 has been in production for several years and continues to receive excellent customer feedback.



FBGs manufactured and sold by Technica under International License from United Technologies Corporation, Inc.

Parameter	Specifications
Center Wavelength	Within 1460nm-1625nm (S+C+L Bands), or custom
Reflectivity %	10% to 99.99%, Flat-top typical > 99.5%
Bandwidth (FWHM)	50/100/200 GHz on ITU Grid For 100GHz: Ref @ -0.5dB > 0.4nm and Ref @ -25dB is 0.75nm For 50GHz: Ref @ -0.5dB > 0.25nm and Ref @ -25dB is 0.5nm
Adjacent Channel Isolation	>25 dB
Insertion Loss	Typical 0.2 dB (< 0.1 dB in radiation mode surpassed fiber)
Cladding Mode Loss	< 0.4 dB (with double cladding suppressed fiber)
Fiber Type	Corning SMF-28, compatibles, or custom
Fiber Coating	Acrylate
Fiber Termination	Bare fiber, FC/APC, FC/UPC, or custom
Thermal Package	7mm DIA x 60mm Cylindrical Type or 60mm x 6mm x 6mm Rectangular Type Thermal Stability: <1 pm/°C

Applications in Telecom, Sensing, Test & Measurement Instrumentation, 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.