

100GHz WDM Filter Chips

Bookham narrowband filters leverage the proprietary Advanced Energetic Deposition (AED) process to produce the industry's best filter solutions. The AED process features state-of-the-art layer thickness control to produce thin-film interference filters for optical add/drop multiplexing (OADM) WDM applications and Mux/Demux.

Bookham offers a range of filtering solutions for 100GHz channel spacing. Filter designs can be optimized for transmission and reflection loss for mux/demux applications or offer deeper reflection notches for optical add/drop multiplexing (OADM).

Features:

- C-band center wavelengths
- Accurate wavelength centering
- High adjacent channel transmission isolation
- Flat transmission passband for cascading
- Excellent temperature stability


Options:

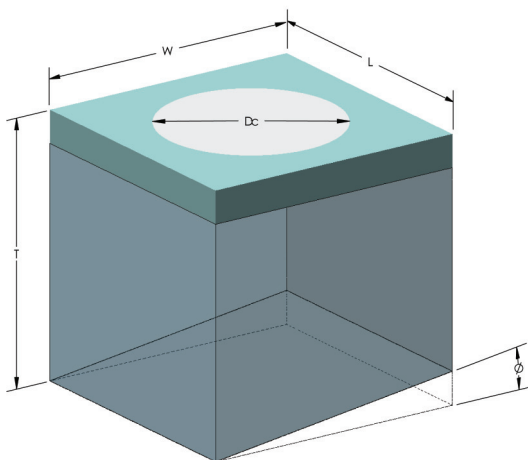
- L-band center wavelengths
- Custom specifications

Applications:

- Mux/Demux
- Optical add/drop multiplexing
- Metro and long-haul DWDM

Compliance:

- GR-1221 qualified
- RoHS compliant 



100GHz Filters

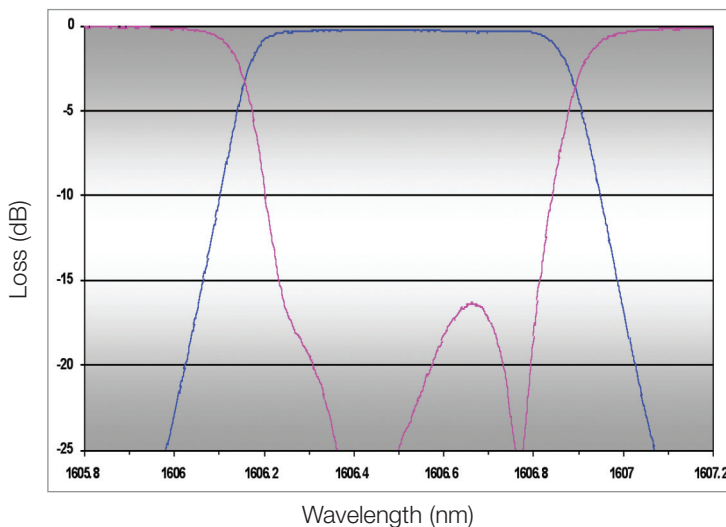
Typical design specifications (valid over operating temperature)

Parameter	Standard Spec 0783	Premium Spec 0264	Unit
Center Wavelength (λ_c)	1530-1560	1527-1565	nm
λ_c Tolerance	ITU +0.3 to +0.65	ITU +0.3 to +0.6	nm
Transmission Bandwidth -0.25dB	-	0.4	min nm
Transmission Bandwidth -0.35dB	0.4	-	min nm
Transmission Bandwidth -25dB	1.18	-	max nm
Transmission Bandwidth -30dB	-	1.2	max nm
Passband Loss Variation	0.35	0.25	max dB
Passband Loss Maximum	0.7	0.75	dB
Reflection Isolation	13	14.5	dB
PDL, Passband & Adj. Channel	0.08	0.08	max dB
Center Wavelength Temp Coefficient	0.8	0.8	max pm/C
Dimensions (L x W x T)	1.4 x 1.4 x 1.0		mm
Backside Wedge Angle (Φ)	0.25		deg
Operating Temperature	-5 to 70		°C
Storage Temperature	-40 to 85		°C
Price for small quantities (in stock)	\$15 with a minimum of \$500 per order	\$25 with a minimum of \$500 per order	

All parameters tested at 0° angle of incidence
Edge chips <0.1mm

Example Performance

100GHz Wide-Top filter performance



RoHS Compliance



Bookham is fully committed to environment protection and sustainable development and has set in place a comprehensive program for removing polluting and hazardous substances from all of its products.

The relevant evidence of RoHS compliance is held as part of our controlled documentation for each of our compliant products. RoHS compliance parts are available to order, please refer to the ordering information section for further details.

Ordering Information:

100GHz Chip numbering convention

T F 1 0 0 1 5 5 3 3 2 9

CENTER WAVELENGTH (nm)
 1553329 = 1553.329

4 digit SPEC# to be found in the table on page 2

\$500 USD minimum order

Specifications and wavelengths subject to stock on hand

\$5,000 USD minimum for orders requiring a coating run

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