



Double-width LGX 118 package shown

Dense WDM (DWDM) Modules

AFL's Dense WDM modules (DWDM) are designed using proven thin-film filter technology featuring low insertion loss, high isolation, and superior environmental stability. DWDM modules are available in 2, 4, 8, and 16 channel configurations, with 100 GHz and 200 GHz spaced central wavelength options on the ITU-T Grid in the C-Band (1528 nm to 1568 nm) and L-Band (1568 nm to 1610 nm). All DWDM modules are factory assembled in a thin cassette package or a rugged LGX[®] cassette with most common industry standard connector options to meet varying system requirements.

Features

- 100 GHz and 200 GHz ITU-T channel spacing
- 2, 4, 8 and 16 channel configurations
- Most industry standard connectors
- Low insertion loss
- High isolation
- Epoxy-free optical path

Applications

- CATV Systems
- Sensor Systems
- 10G Ethernet Systems
- Metro Optical Networks
- Metro Access Networks

Specifications

PARAMETER	VALUE							
	100 GHZ DWDM				200 GHZ DWDM			
Ports	2	4	8	16	2	4	8	16
Center Wavelength	1531-1561 nm (CH. 20-58)				1530-1560 (CH. 21-59)			
Passband @ 0.5 dB	>0.25 nm				>0.6 nm			
Passband	±0.11 nm				±0.25 nm			
Passband Flatness	<0.5 dB				<0.5 dB			
Insertion Loss (Typ.)	1.4 dB	1.6 dB	2.6 dB	3.8 dB	1.4 dB	1.6 dB	2.6 dB	3.8 dB
Insertion Loss (Max.)	1.8 dB	2.0 dB	3.2 dB	4.5 dB	1.8 dB	2.0 dB	3.2 dB	4.5 dB
Adjacent Channel Isolation	>25 dB				>25 dB			
Non-Adjacent Channel Isolation	>45 dB				>45 dB			
Wavelength Thermal Stability	<0.001 nm/°C				<0.002 nm/°C			
IL Thermal Stability	<0.005 db/°C	<0.005 db/°C	<0.007 db/°C	<0.007 db/°C	<0.005 db/°C	<0.005 db/°C	<0.007 db/°C	<0.007 db/°C
Return Loss	>45 dB				>45			
PMD	<0.10 ps	<0.10 ps	<0.10 ps	<0.15 ps	<0.10 ps	<0.10 ps	<0.10 ps	<0.15 ps
PDL	<0.10 dB	<0.20 dB	<0.20 dB	<0.25 dB	<0.10 dB	<0.20 dB	<0.20 dB	<0.25 dB
Directivity	>50 dB				>50			
LGX 118 Package	Single-width	Single-width	Double-width	Triple-width	Single-width	Single-width	Double-width	Triple-width
Thin Cassette Package	88.9 x 50.8 x 8.3 nm	120 x 80 x 13 nm	130 x 87 x 13 nm	150 x 115 x 13 nm	88.9 x 50.8 x 8.3 nm	120 x 80 x 13 nm	130 x 87 x 13 nm	150 x 115 x 13 nm

Qualifications

GOVERNING BODY	STANDARD CODE	COMPONENT
Telcordia	Compliant	Cable

Temperature Specifications

	100 GHZ DWDM	200 GHZ DWDM
Operation Temperature	-5°C to +65°C	-5°C to +65°C
Storage Temperature	-40°C to +85°C	-40°C to +85°C

Contact AFL for further details.