AWG Array Waveguide Grating

Product Overview

Arrayed waveguide gratings (AWG) are commonly used as optical (de)multiplexers in wavelength division multiplexed (WDM) systems. These devices are capable of multiplexing a large number of wavelengths into a single optical fiber, thereby increasing the transmission capacity of optical networks considerably.

Features

- Low insertion loss
- Good channel loss consistency
- Low polarization loss
- High-channel isolation
- High reliability

Performance Index

Parameters	Notes	Specifications		Units
		Min	Max	
Channels	---	40		Ch
Channel Spacing	---	100		GHz
Reference Pass-band	Relative to ITU Grid	± 0.1		nm
ITU Frequency	On ITU grid in C-band Even	196.00	192.10	THz
ITU Wavelength	On ITU grid in C-band Even	1529.55	1560.60	nm
ITU Frequency	On ITU grid in C-band ODD	196.05	192.15	THz
ITU Wavelength	On ITU grid in C-band ODD	1529.16	1560.20	nm
Center Frequency Accuracy	Max of the absolute deviation of the 3dB center wavelength from ITU grid over all channels	-0.05	+0.05	nm
Insertion Loss	Maximum of the insertion loss across the ITU pass-band over all channels	---	6.2	dB
Insertion Loss Uniformity	Maximum insertion loss variance across all channels	---	1.3	dB
Ripple	Maximum of the loss variance across the ITU pass-band over all channels	---	0.5	dB
0.5 dB Bandwidth	0.5 dB from min Insertion Loss, full width, worst case polarization	0.2	---	nm

Guilin Tryin Technology Co., Ltd
Room C306, Innovation Building, Information Industry Park, Chaoyang Road, Guilin. China
Tel: 0773-3362165 Mobile:0086 18178339418 Fax: 0773-5863101 Email: jerlinchiu@tryincn.com

1dB Bandwidth	1dB from min Insertion Loss, full width, average polarization	0.4	---	nm
3dB Bandwidth	3 dB from min Insertion Loss, full width, average polarization	0.55	---	nm
20 dB bandwidth	20 dB from min Insertion Loss, full width, average polarization	---	1.2	nm
Adjacent Channel Isolation	Ratio of peak transmission to the maximum transmission over both adjacent pass-bands	25	---	dB
Non-Adjacent Channel Isolation	Ratio of peak transmission in channel pass-bands to maximum transmission over all non-adjacent pass-bands	30	---	dB
Total Crosstalk	Ratio of power in channel to power in all other pass-bands	21	---	dB
Polarization Dependent Loss	Maximum ratio of transmissions over all polarization states, over the ITU pass-band	---	0.5	dB
Return Loss	---	40	---	dB
Polarization Mode Delay (PMD)	In Reference Passband over all channels	---	0.5	ps
Chromatic Dispersion	In Reference Passband over all channels	-15	15	ps/nm

Guilin Tryin Technology Co., Ltd
Room C306, Innovation Building, Information Industry Park, Chaoyang Road, Guilin. China
Tel: 0773-3362165 Mobile:0086 18178339418 Fax: 0773-5863101 Email: jerlinchiu@tryincn.com