1、Description

Athermal AWG have equivalent performance to standard Thermal AWG but require no electrical power for stabilization.they can be used as direct replacements for Thin Film Filters(Filter type DWDM module) for cases where no power is available, also suitable for outdoor applications over -30 to +70° in access networks. Athermal AWG provide excellent optical performance,high reliability, ease of fiber handling and power saving solution in a compact package. Different input and output fibers, such as SM fibers,MM fibers and PM fiber can be selected to meet different applications. We can also offer different product packages, inluding special metal box and 19" 1U rackmount.

2、Features

- Low Insertion Loss
- Established silica-on-silicon
- Low PDL
- Low chromatic dispersion
- Telcordia GR-1221-CORE qualified

3、Specification

Parameters	Condition	Specs			Units
		Min	Type	Max	
Number of Channels			40		ch
Number Channel Spacing	100GHz		100		GHz
Cha. Center Wavelength	ITU frequency.		C-band		nm

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Clear Channel Passband			±0.1		nm
Wavelength Stability	Maximum range of the wavelength error of all channels and temperatures in average		±0.05		nm
-1 dB Channel Bandwidth	Clear channel bandwidth defined by passband shape. For each channel	0.36			nm
-3 dB Channel Bandwidth	Clear channel bandwidth defined by passband shape. For each channel	0.51			nm
Optical Insertion Loss at ITU grid	Defined as the minimum transmission at ITU wavelength for all channels. For each channel, at all temperatures and polarizations.		4.5	6.0	dB
Adjacent Channel Isolation	Insertion loss difference from the mean transmission at the ITU grid wavelength to the highest power, all polarizations, within the ITU band of the adjacent channels.	25			dB
Non-Adjacent, Channel Isolation	Insertion loss difference from the mean transmission at the ITU grid wavelength to the highest power, all polarizations, within the ITU band of the nonadjacent channels.	30			dB
Total Channel Isolation	Total cumulative insertion loss difference from the mean transmission at the ITU grid wavelength to the highest power, all polarizations, within the ITU band of all other channels, including adjacent channels.	24			dB
Insertion Loss Uniformity	Maximum range of the insertion loss variation within ITU across all channels, polarizations and temperatures.			1.0	dB
Directivity(Mux Only)	Ratio of reflected power out of any channel(other than channel n)to power in from the input channel	40			dB
Insertion Loss Ripple	Any maxima and any minima of optical loss across ITU band, excluding boundary points, for each channel at each port			1.0	dB
Optical Return loss	Input & output ports	40			dB

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PDL/Polarization Dependent Loss in Clear Channel Band	Worst-case value measured in ITU band		0.3	0.5	dB
Polarization Mode Dispersion				0.5	ps
Maximum Optical Power				23	dBm
MUX/DEMUX input/ output Monitoring range		-35		+23	dBm
Operating Temperature		-5	+25	+65	℃
Operating Humidity		5		95	%RH
Storage Temperature		-40		+85	℃
Storage Humidity		5		95	%RH
Package Size		L120 x W70 x H10			mm
Size between screws		110 x 60			mm

1、 IL Represents the worst case over a +/-0.01nm window around the ITU wavelength;

2、 PDL was measured on average polarization over a +/- 0.01nm window around the ITU wavelength.

4、 Application

- DWDM transmission
- Wavelength Routing
- Optical add/drop multiplexing

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5、Ordering Information:

AWG	X	XX	X	XXX	X	X	X	XX
	Band	Number of Channels	Spacing	1st Channel	Filter Shape	Package	Fiber Length	In/Out Connector
	C=C-Band L=L-Band D=C+L-Band X=Special	16=16-CH 32=32-CH 40=40-CH 48=48-CH XX=Special	1=100G 2=200G 5=50G X=Special	C60=C60 H59=H59 C59=C59 H58=H58 XXX=special	G=Gaussian B=Broad Gaussiar F=Flat Top	M=Module R=Rack X=Special	1=0.5m 2=1m 3=1.5m 4=2m 5=2.5m 6=3m S=Specify	0=None 1=FC/APC 2=FC/PC 3=SC/APC 4=SC/PC 5=LC/APC 6=LC/PC 7=ST/UPC S=Specify