

## Flyin 40-CH 100G Thermal AWG

Flyin Optronics offers a full range of Thermal/Athermal AWG products, including 50GHz, 100GHz and 200GHz Thermal/Athermal AWG. Here we present the generic specification for the 40-channel 100GHz Flat Top Thermal AWG (40 channel TAWG) MUX/DEMUX component supplied for use in DWDM system.

Flyin's 40 channel 100G Thermal AWG(100G TAWG) is designed for use within the C -band release of DWDM system. To decrease the power dissipation of the devices in different environmental conditions, the TAWG package is special designed with selection of reliable thermal plastic with low thermal conduction, and the TAWG operating temperature is controlled by using foil resist heater or Peltier TEC with thermistor temperature sensor. 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, including special metal box and 19" 1U rackmount.

The planar DWDM components(Thermal/Athermal AWG) from Flyin Optronics are fully qualified according to Telcordia reliability assurance requirements for fiber optic and opto-electronic components (GR-1221-CORE/UNC, Generic Reliability Assurance Requirements for Fiber Optic Branching Components, and Telcordia TR-NWT-000468, Reliability Assurance Practices for Opto-electronic Devices).

### Features

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

### Applications

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



### Optical Specification (Flat Top Thermal AWG)

Parameters	Specs			Units
	Min	Typ	Max	
Number of Channels	40			
Number Channel Spacing	100			GHz
Cha. Center Wavelength	C -band			nm
Clear Channel Passband	±0.1			nm
Wavelength Stability	±0.05			nm
-1 dB Channel Bandwidth	0.4			nm
-3 dB Channel Bandwidth	0.6			nm
Optical Insertion Loss at ITU grid		4.5	6.0	dB
Adjacent Channel Isolation	25			dB

Non-Adjacent, Channel Isolation	30			dB
Total Channel Isolation	22			dB
Insertion Loss Uniformity		1.0	1.5	dB
Directivity(Mux Only)	40			dB
Insertion Loss Ripple			0.5	dB
Optical Return loss	40			dB
PDL/Polarization Dependent Loss in Clear Channel 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	°C
Operating Humidity	5		95	%RH
Storage Temperature	-40		+85	
Storage Humidity	5		95	
Package Size	150 x 65 x 16			mm
Size between screws	140 x 68			mm

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

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

## 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	16=16-CH	1=100G	C60=C60	G=Gaussian	M=Module	1=0.5m	0=None
	L=L-Band	32=32-CH	2=200G	H59=H59	B=Broad	R=Rack	2=1m	1=FC/APC
	D=C+L-Band	40=40-CH	5=50G	C59=C59	Gaussian	X=Special	3=1.5m	2=FC/PC
	X=Special	48=48-CH	X=Special	H58=H58	F=Flat Top		4=2m	3=SC/APC
		XX=Special		XXX=special			5=2.5m	4=SC/PC
							6=3m	5=LC/APC
							S=Specify	6=LC/PC
								7=ST/UPC
								S=Specify