

Passive DWDM System 50GHZ DWDM AAWG

FiberWDM's Dense Wavelength Division Mux/Demultiplexer Athermal Arrayed Waveguide Grating(AAWG) Modules are part of a series of high performance products based on silica-on-silicon planar technology and a unique athermal packaging design requiring no electrical power, software or temperature control for a completely passive DWDM solution. This product range offers a combination of very low loss and high channel isolation along with long term reliability .Each module can perform Mux and Demux functions. Both C- and L-band devices are available with flat top spectral response. Custom frequency grids, fiber types and connector options are also available.

Product

DWDM AAWG module 80 channels or 96 channels (C21-60), Gaussian Type, single fiber

Features

- ◆ Low insertion loss
- ◆ High isolation
- ◆ Low PDL
- ◆ Compact design
- ◆ Good channel-to-channel uniformity
- ◆ Wide operating wavelength
- ◆ Wide operating temperature: -20 to 70 °C



DWDM AAWG Module

Applications

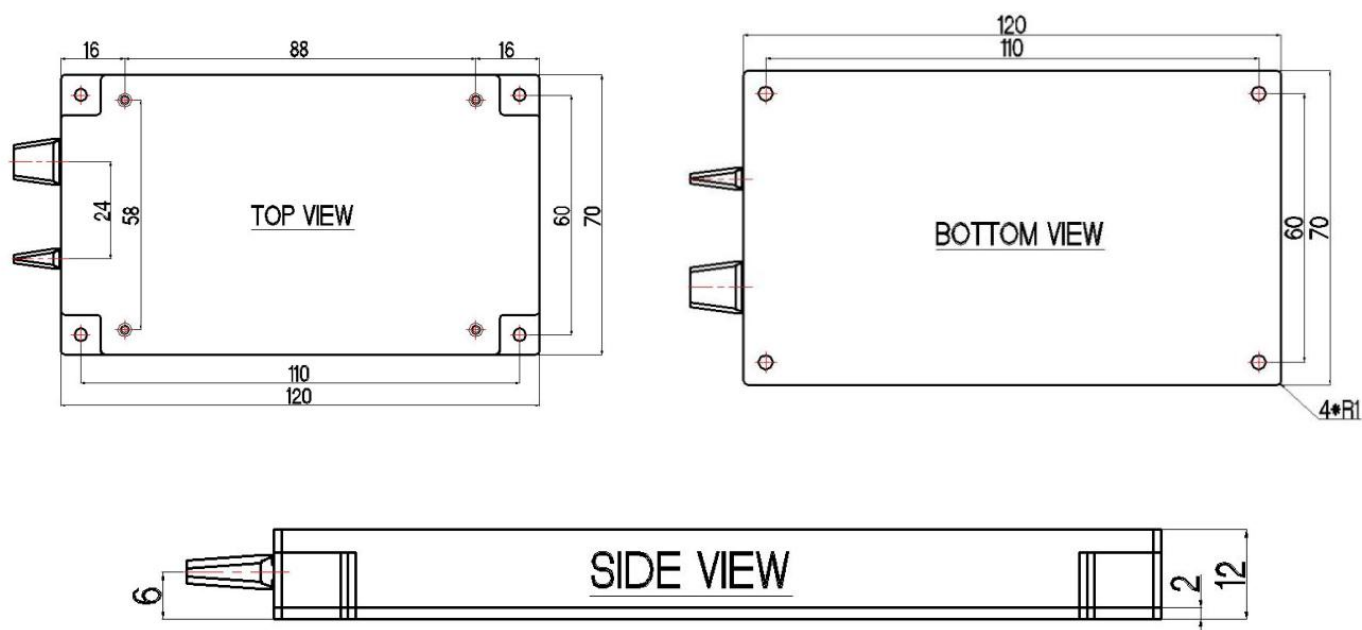
- ◆ DWDM system
- ◆ PON networks
- ◆ CATV links
- ◆ Fiber optical amplifier
- ◆ Wavelength routing

Specifications

Parameter		Unit	value	
Operating wavelength		GHz	ITU Band	
Bandwidth interval		GHz	50	
Port number		CH	80 or 96CH	
Precision	Max	nm	0.05	
Insert lose	Max	dB	7.0	
-1dB bandwidth	Min	nm	0.18	
-3dB bandwidth	Min	nm	0.28	
Insulation	Adjacent CH	Min	dB	27
	Unajacent CH	Min	dB	30

Crosstalk	Min	dB	25
Flatness	Max	dB	0.7
PDL	Max	dB	0.5
Uniformity	Max	dB	1.5
Directivity	Min	dB	50
Return lose	Min	dB	40
Maximum load power	Max	mW	300
Operating temperature	°C		-20~70
Storage temperature	°C		-40~85
Fiber type			SMF-28 / SMF-28e
Connector			LC/SC/FC
Package			(L)120×(W)70×(H)12.7

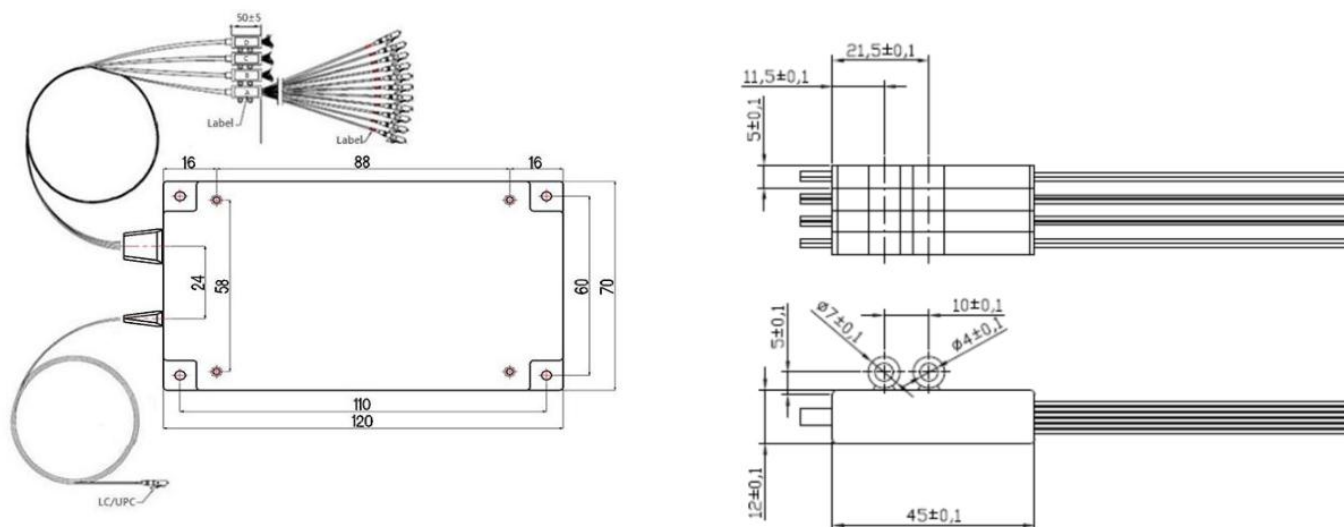
Dimensions



Fiber Connector Specifications

Parameter	Unit	Specification
Fiber Type		SMF28e with 900um Loose Tube Fiber
Fiber Format		2 x 8 + 2 x 12 -Fiber ribbons
Input Common Fiber Length	mm	1000+/- 50
Ribbon Fiber	mm	1000+/- 50
Fanout Fiber	mm	500+/- 50

Connector Type	LC/UPC
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LC Wavelength Guide

50GHZ DWDM ITU Waves					
ITU Channel Product Code	Frequency(THz)	Wavelength	ITU Channel Product Code	Frequency(THz)	Wavelength
C17	191.70	1563.86	C41	194.10	1544.53
H17	191.75	1563.45	H41	194.15	1544.13
C18	191.80	1563.05	C42	194.20	1543.73
H18	191.85	1562.64	H42	194.25	1543.33
C19	191.90	1562.23	C43	194.30	1542.94
H19	191.95	1561.83	H43	194.35	1542.54
C20	192.00	1561.42	C44	194.40	1542.14
H20	192.05	1561.01	H44	194.45	1541.75
C21	192.10	1560.61	C45	194.50	1541.35
H21	192.15	1560.20	H45	194.55	1540.94
C22	192.20	1559.79	C46	194.60	1540.56
H22	192.25	1559.39	H46	194.65	1540.16
C23	192.30	1558.98	C47	194.70	1539.77
H23	192.35	1558.58	H47	194.75	1539.37
C24	192.40	1558.17	C48	194.80	1538.98
H24	192.45	1557.77	H48	194.85	1538.58
C25	192.50	1557.36	C49	194.90	1538.19
H25	192.55	1556.96	H49	194.95	1537.79
C26	192.60	1556.55	C50	195.00	1537.40
H26	192.65	1556.15	H50	195.05	1537.00
C27	192.70	1555.75	C51	195.10	1536.61

H27	192.75	1555.34	H51	195.15	1536.22
C28	192.80	1554.94	C52	195.20	1535.82
H28	192.85	1554.54	H52	195.25	1535.43
C29	192.90	1554.13	C53	195.30	1535.04
H29	192.95	1553.73	H53	195.35	1534.64
C30	193.00	1553.33	C54	195.40	1534.25
H30	193.05	1552.93	H54	195.45	1533.86
C31	193.10	1552.52	C55	195.50	1533.47
H31	193.15	1552.12	H55	195.55	1533.07
C32	193.20	1551.72	C56	195.60	1532.68
H32	193.25	1551.32	H56	195.65	1532.29
C33	193.30	1550.92	C57	195.70	1531.90
H33	193.35	1550.52	H57	195.75	1531.51
C34	193.40	1550.12	C58	195.80	1531.12
H34	193.45	1549.72	H58	195.85	1530.72
C35	193.50	1549.32	C59	195.90	1530.33
H35	193.55	1548.92	H59	195.95	1529.94
C36	193.60	1548.51	C60	196.00	1529.55
H36	193.65	1548.11	H60	196.05	1529.16
C37	193.70	1547.72	C61	196.10	1528.77
H37	193.75	1547.32	H61	196.15	1528.38
C38	193.80	1546.92	C62	196.20	1527.99
H38	193.85	1546.52	H62	196.25	1527.61
C39	193.90	1546.12	C63	196.30	1527.22
H39	193.95	1545.72	H63	196.35	1526.83
C40	194.00	1545.32	C64	196.40	1526.44
H40	194.05	1544.92	H64	196.45	1526.05

Note: FIBERWDM Support Customized Design, please contact us by email sales@fiberwdm.com