

Super C-band 60ch+MON 100GHz DWDM MUX/DEMUX 1U LC/UPC

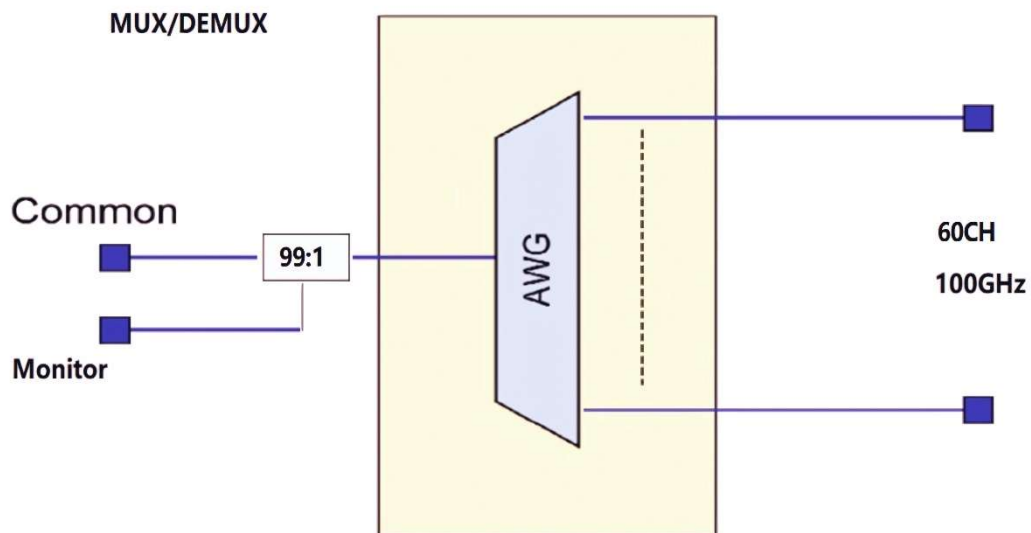
This 60 Channels DWDM Mux Demux has 100GHz channel spacing and performs 60 channel multiplexing or demultiplexing at the ITU wavelengths in Super C-band, greatly expanding the effective working spectrum compared with the traditional C band and extended C band. It offers a combination of low optical insertion loss and high channel isolation along with long term reliability



Product Information

60 Channels Super C-band 100GHz with Monitor Port, LC/UPC, Dual Fiber DWDM Mux Demux, 1U Rack Mount

Product Application



Optical Specifications

Parameter	Specification			Units	Notes
	Min	Type	Max		
Channel Spacing	100			Ghz	
Technology	AAWG (Flat-top)				
Nos of Channel	60			Channels	
Channel Frequencies	ITU Grid			THz	
Available Channel Frequency Range	Odd	190.75	196.650	THz	1524.50-1571.65nm
	Even	190.7	196.600	THz	1524.89-1572.06
Channel Passband		-12.5	+12.5	Ghz	
		-0.10	+0.10	nm	
Center Wavelength Accuracy	-0.05		+0.05	nm	
Insertion Loss @com		6	6.7	dB	@Center Wavelength
Insertion Loss @mon			22	dB	1%
Passband Ripple		1.0	1.5	nm	Full Bandwidth
Bandwidth @1.0dB	0.22			nm	
Bandwidth @3.0dB	0.42			nm	
Bandwidth @20dB			1.20	nm	
Insertion Loss Uniformity at ITU			1.20	dB	
Polarization Dependent Loss			0.5	dB	
Adjacent Channel Isolation	25			dB	
Non-Adjacent Channel Isolation	30			dB	
Total Cross Talk	24	24		dB	
Directivity	40			dB	
Return Loss with connectors	40	45		dB	
Chromatic Dispersion	-20		+20	ps/nm	
PDL			0.5	dB	
PMD			1.0	ps	
Optical Power Handling of Common Port			24	dBm	
Net Weight			3.5	KGS	
Dimensions (HxWxD)	44x481.8x230mm			mm	

Operating Conditions

Parameter		Min		Max	Units
Temperature		-5		65	°C
Humidity	Non-condensing	0		90	% R.H.

Storage Conditions

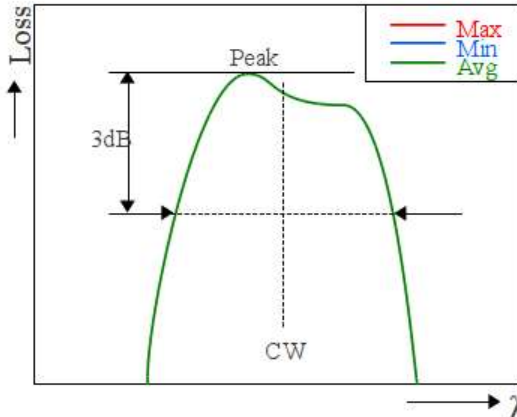
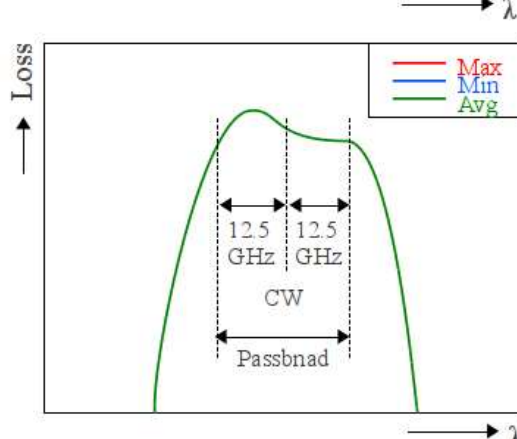
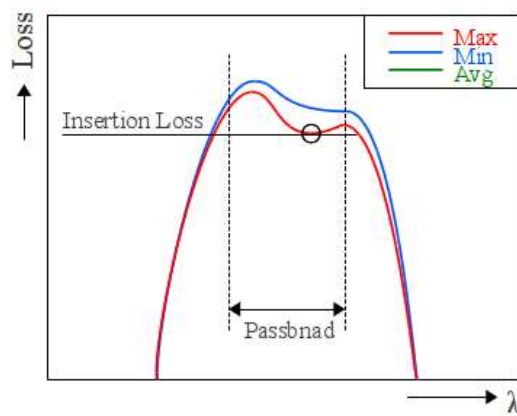
Parameter		Min		Max	Units
Temperature		-40		85	°C
Humidity	Non-condensing	0		90	% R.H.

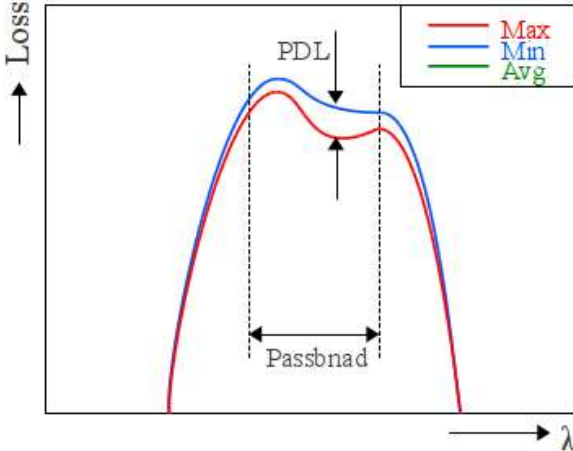
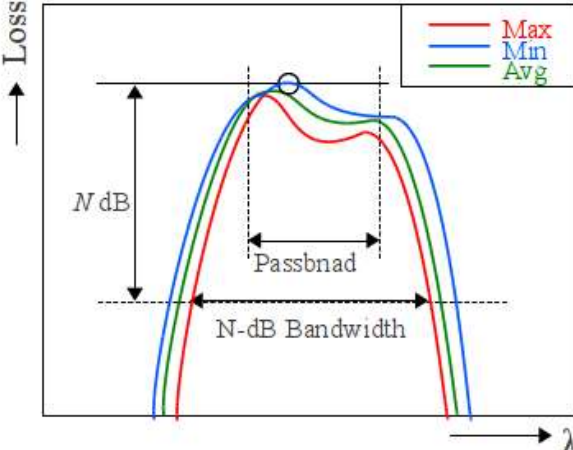
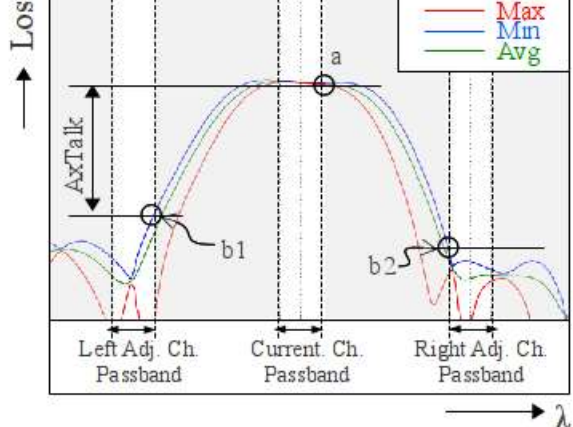
Channel Plan 60 Port AWG - On grid

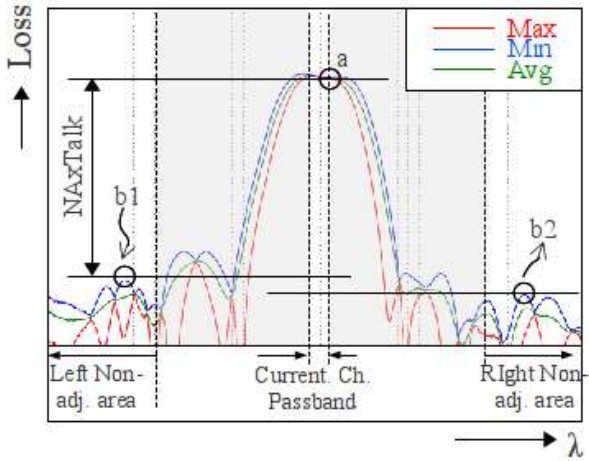
The AWG operate in C-band. The C-band channel allocation is based on ITU-T Grid. The channels are as follows:

Channel	Odd		Even	
	f(THz)	λ (nm)	f(THz)	λ (nm)
1	196.65	1524.50	196.60	1524.89
2	196.55	1525.27	196.50	1525.66
3	196.45	1526.05	196.40	1526.44
4	196.35	1526.83	196.30	1527.21
5	196.25	1527.60	196.20	1527.99
6	196.15	1528.38	196.10	1528.76
7	196.05	1529.16	196.00	1529.54
8	195.95	1529.94	195.90	1530.33
9	195.85	1530.72	195.80	1531.11
10	195.75	1531.50	195.70	1531.90
11	195.65	1532.28	195.60	1532.68
12	195.55	1533.06	195.50	1533.46
13	195.45	1533.84	195.40	1534.23
14	195.35	1534.62	195.30	1535.04
15	195.25	1535.40	195.20	1535.82
16	195.15	1536.22	195.10	1536.61
17	195.05	1537.00	195.00	1537.40
18	194.95	1537.78	194.90	1538.19
19	194.85	1538.58	194.80	1538.97
20	194.75	1539.36	194.70	1539.77
21	194.65	1540.14	194.60	1540.55
22	194.55	1540.95	194.50	1541.35
23	194.45	1541.73	194.40	1542.14
24	194.35	1542.51	194.30	1542.94
25	194.25	1543.33	194.20	1543.74
26	194.15	1544.11	194.10	1544.54
27	194.05	1544.92	194.00	1545.34
28	193.95	1545.72	193.90	1546.13
29	193.85	1546.52	193.80	1546.92
30	193.75	1547.32	193.70	1547.71
31	193.65	1548.11	193.60	1548.50

DEFINITIONS

Description	Image
<p>Center Wavelength (CW):</p> <p>Average of wavelengths where transmission has dropped 3dB from the peak transmission.</p>	
<p>Passband (PB):</p> <p>CW ± 12.5GHz for 60ch 100GHz AWG</p>	
<p>Insertion Loss (IL):</p> <p>The minimum transmission within passband for all polarization states. It represents the worst possible loss within passband.</p>	

Description	Image
<p>Polarization Dependent Loss (PDL):</p> <p>The maximum value that the transmission can vary over all polarization states at a fixed wavelength over the entire passband.</p>	
<p>N-dB Bandwidth:</p> <p>Minimum effective bandwidth reflecting the PDW for worst case of polarization states where transmission has dropped N-dB down from the peak. (N=1, 3, 20)</p>	
<p>Adjacent Crosstalk (AxTalk):</p> <p>The highest transmission within adjacent passbands referenced to the worst case transmission (a) within the selected channel passband. Where, the highest and lowest transmissions are determined for any possibly different polarization states within each passband. (i.e., min (a-b1, a-b2))</p>	

Description	Image
<p>Non-adjacent Crosstalk (NAxTalk):</p> <p>The highest transmission within a non-adjacent passband referenced to the worst case transmission within the selected channel passband. Where, the highest and lowest transmissions are determined for any possibly different polarization states within each passband. (i.e., $a - \max(b1, b2)$)</p>	
<p>Total Crosstalk (TxTalk):</p> <p>The cumulative sum of all transmissions of all other channels referenced to the worst case transmission within the selected channel passband.</p>	