

DESCRIPTION

Jabil Photonics DWDM optical filters have low insertion and low polarization dependent losses.

Different filters are available for the add/drop of 1, 2, 4, 8, 16 channels (in any combination as per customer requirements). In addition it is possible to monitor the signal at the ingress or at the egress of the line system, and to provide additional features like the possibility to add/drop a bandwidth or to manage at the same time CWDM and DWDM wavelengths.

The filter can be packaged in an LGX compatible module but also customization is possible. It is designed to be used in extreme temperature environments within a temperature range of -40° to $+85^{\circ}$ C.

Standard version is the two fiber pair (one fibers for RX and one fiber for TX) at 100GHz channel spacing, with LC/APC connectors, monitoring port and upgrade port. Customized versions are available.



KEY FEATURES

MUX/DMUX/OADM

Low insertion loss, wide bandwidth and high isolation

High stability and high reliability

Any combination of ITU wavelength plan

Fully customized to customer requirements

Telcordia GR-1209, GR-1221-CORE qualified

Mini-cassette, Fiber Tray, LGX & Rackmount

APPLICATIONS

Data Center Interconnect

Enterprise networking

Access networks

CATV fiber optic links

COMPLIANCES

Compliant with Telcordia GR-1209, GR-1221-CORE

Compliant with RoHS-6

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ENVIRONMENTAL SPECIFICATIONS

Parameter	Min.	Тур.	Max.	Unit
Operation Temperature	-40		+85	°C
Storage Temperature	-40		+85	°C
Operation Humidity*	5		95	%
Storage Humidity	5		95	%

(*) not condensing

OPTICAL SPECIFICATIONS

Parameter	Value	Note	Unit
Channel Spacing	100		GHz
Channel Pass Band@0.5dB	± 0.125nm		nm
Operating Wavelength	1527.22 - 1564.68	C16-63	nm
UPG Wavelength	1527.22 - 1564.68 (Except channel used)		nm
EXP Wavelength Range	1260-1520, 1570-1635		nm
MON Insertion Loss	19-21	Only coupler	dB
Ripple	≤ 0.5		dB
UPG & EXP Isolation	≥ 12		dB
Adjacent Channel Isolation	≥ 30		dB
Non-adjacent Channel Isolation	≥ 40		dB
PDL	≤ 0.2		dB
PMD	≤ 0.15		ps
Return Loss	≥ 45		dB
IL Thermal stability	≤0.005		dB/°C
Wavelength Thermal Stability	≤0.002		nm/°C
Directivity	≥ 45		dB
Maximum Input Power	≤300		mW
MAX Channel Insertion Loss	1.8		dB
MAX UPG Insertion Loss	1.8		dB
MAX EXP Insertion Loss	1		dB



ORDERING INFORMATION

WDM	TYPE	#CHAN	NELS	GRID		FORM		TECHNOLOG	GΥ	CH PLAN	CONNECTOR
CWDM	MUX/DEMU	X 2CH		100GHZ				TFF			
SINGLE / DU	AL FIBER	EXPRESS	UPGR	ADE	мо	N	FIBE	LENGTH	FIBE	R DIA	OTHERS
DUAL		EXP	UPG		TXR	хмол					
UPG port (see MUX: unidirec DEMUX: unidi 3. #Channels:	oarse WDM : it can also act as C dedicated field) tional application w rectional applicatio Id/dropped channe	vith only MUX fu n with only DEM el&CH,4CH,8CH, VDM)	nction IUX funct	CH etc.			ad 10	ditional reques EXPRESS: it ir filtering the ch CWDM and EXP: it indicates th UPGRADE: it (not dropped OADM config of expanding	ndicat nanne DWD that EX indica I) is se uratic ; the r	es if additional ls. This typically M network is n PRESS port (or port ates that the re: nt to an UPGR, ons and to Term	pair) is requested. st of the channels ADE port. This applies inal MUX with the poss inated channels
5. Form: form f HDLGX2) 6. Technology: TFF (typically f AAWGM (typi	·	eCGM, LGX :	1RU, LG	X 2RU, H	DLG>	K1 ,	12	There are so RXMON: monitor TXMON: monitor TXRXMON: pair of (ingress line) and	ing asso ing asso of moni d to Egr	octions possible: octiated to the Ingress octiated to the Egress toring ports associations coss COM interface (ss COM interface (ingress line) s COM interface (egress line) ted to both the Ingress COM i
	the first and the last els to be managed	t channel in case	of consec	utive channe	els or th	ne	13	Fiber Length: 0.5M : 50cm 1M : 1 meter 2M : 2 meter			
 Connector: LCA (LC/APC) LCU (LC/UPC) sCU (SC/UPC) Single/Dual 		UPC)					14	Fiber Diamete 900um 250um 1.2mm 2mm 3mm	er:		
SINGLE: Single each port, ar	Fiber application: d some channels a ber application: pai	re used for TX ar	nd others	for RX		for	15	Others: it is a	lso po	ssible to specif	y other characteristics

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For additional information, visit jabil.com/photonics



CHANNEL PLAN

191.701563.8617017191.751563.451751191.801563.0518018191.801562.2319019191.901562.2319019191.951561.831951192.001561.4220020192.051561.012051192.101560.6121021192.251560.6121021192.201560.722022192.251559.7922022192.251558.8823023192.301558.772451192.401558.772451192.501557.362551192.501556.5526026192.501556.5526026192.501557.5527027192.50155.412651192.60155.412651192.75155.342751192.80155.452651192.80155.452651192.80155.452651192.80155.452651192.80155.452651192.80155.452651192.80155.452651192.80155.452651192.80155.452651192.80155.452651192.80155.452651 <th>Channel (nm)</th> <th>Frequency (THz)</th> <th>50GHZ GRID CHANNEL NUMBER</th> <th>100GHZ-200GHZ GRID CHANNEL NUMBER</th>	Channel (nm)	Frequency (THz)	50GHZ GRID CHANNEL NUMBER	100GHZ-200GHZ GRID CHANNEL NUMBER
191.801563.0518018191.851562.4418519191.901562.2319019191.951561.8319510192.001561.4220020192.051561.012051192.101560.6421021192.151560.202151192.201557.7922022192.301558.892353192.401558.812353192.401558.7724024192.451557.7724525192.451556.962551192.401558.7820026192.45155.7724525192.45155.4526026192.45155.4526026192.45155.4526026192.45155.4526026192.45155.4527027192.45155.4428028192.40155.4428028192.40155.452651192.40155.452611192.40155.4428028192.40155.442851192.40155.442851192.40155.452611192.40155.452851192.40155.452851192.40155.452851192.40155.452851<	191.70	1563.86	170	17
191.85156.264185191191.90156.2319019191.95156.18319520192.00156.14220020192.01156.01201192.10156.02211192.20155.97922022192.30155.8982323192.40155.81724024192.41155.772451192.52155.3642551192.42155.7526025192.43155.7526026192.44155.7526026192.45155.452651192.45155.452651192.45155.4526026192.45155.4526026192.45155.452651192.45155.4526026192.45155.4526026192.45155.4526026192.45155.45261192.45155.45261192.45155.442828192.45155.452651192.45155.452651192.45155.452651192.45155.452651192.45155.452651192.45155.452651192.45155.452651192.45155.452651 <td< td=""><td>191.75</td><td>1563.45</td><td>175</td><td></td></td<>	191.75	1563.45	175	
1919015622319019191955618319510192005614220201920516601205119210156022111921015602202192201557.9202192301558.983023192401558.1724024192401557.724525192501557.362502192401557.362602192511556.96261219240155.75245219250155.75200219240155.91261219250155.91261219240155.91261219250155.91261219240155.91200219250155.34200219270155.34200219280154.94200219290154.1320219291155.3325219292155.3325219293155.3320219294155.333030	191.80	1563.05	180	18
191.951561.83195I192.001561.4220020192.051561.012051192.101560.6121021192.151560.202152192.201557.7922022192.351558.9823023192.401558.7724324192.501557.7724525192.501556.9625525192.501556.9625526192.401556.7526026192.501556.9625526192.601556.9625526192.601556.9526026192.701556.1526626192.701556.4526526192.75155.4427528192.80154.9428028192.80154.5428529192.90155.3329529192.90155.3330030	191.85	1562.64	185	
192.001561.4220020192.05156.012051192.101560.6121021192.151560.202152192.201557.7922022192.301558.9823023192.401558.7724024192.451557.7724525192.501556.9625525192.501556.9625526192.401557.7625626192.501556.9625526192.601556.9625526192.601556.9526626192.701556.1526626192.70155.4127526192.80154.9428028192.80154.3329029192.90155.3329510192.90155.3330030	191.90	1562.23	190	19
192.05154.01205Indext and the set of the set	191.95	1561.83	195	
192.101560.4121021192.151560.2021520192.201559.7922022192.251559.392323192.301558.7823524192.401558.7724024192.501557.7724525192.50155.6925525192.50155.6925526192.50155.7326026192.60155.5426526192.70155.7527027192.71155.3427527192.801554.9428028192.901554.3329529192.91155.3330030	192.00	1561.42	200	20
192.151560.20215157192.201559.7922022192.251559.392251192.301558.9823023192.351558.582351192.401558.1724024192.451557.772451192.501557.3625025192.601556.9625526192.611556.5526026192.701556.1526526192.701555.7527027192.811554.9428028192.821554.9428528192.831554.332951192.901554.3330030	192.05	1561.01	205	
192201559.792022192251559.392251192301558.982023192351558.582351192401558.1724024192451557.772455192501557.3625025192.601556.5526026192.611556.5526626192.621557.5526526192.701555.7527027192.801554.4428028192.811554.5428528192.821554.3329029192.931553.3330030	192.10	1560.61	210	21
192.251559.392251192.301558.9823023192.351558.5823524192.401558.1724024192.451557.7724525192.501557.3625526192.501556.9625526192.601556.5526026192.611556.1526526192.701555.7527027192.801554.9428028192.811554.3428028192.921554.3329529192.931553.3330030	192.15	1560.20	215	
192.301558.9823023192.351558.58235-192.401558.1724024192.451557.77245-192.501557.3625025192.511556.962606192.601556.152606192.701555.7527027192.80155.3425528192.801554.9428028192.811554.9429029192.821554.3329529192.901554.3330030	192.20	1559.79	220	22
192.35 1558.58 235 192.40 1558.17 240 24 192.45 1557.77 245 - 192.50 1557.36 250 25 192.55 1556.96 255 - 192.60 1556.55 260 26 192.61 1556.15 265 26 192.62 1557.55 260 26 192.65 1556.15 265 26 192.65 1556.15 260 27 192.65 1556.15 260 26 192.70 1555.34 275 27 192.80 155.34 275 28 192.80 1554.34 280 28 192.80 1554.34 290 29 192.90 1554.33 295 29 192.95 1553.33 300 30	192.25	1559.39	225	
192.401558.1724024192.451557.774451192.501557.3625025192.511556.9625526192.601556.1526026192.701555.7526527192.75155.3427528192.801554.5428528192.901554.1329029192.911553.73295300	192.30	1558.98	230	23
192.451557.772451192.501557.3625025192.551556.9626026192.601556.5526026192.651556.1526527192.701555.7527027192.751555.3427528192.801554.5428528192.901554.1329029192.951553.3330030	192.35	1558.58	235	
192.501557.3625025192.551556.96255260192.601556.5526026192.551556.15265270192.701555.7527027192.801554.9428028192.851554.5428529192.901554.3329529192.951553.3330030	192.40	1558.17	240	24
192.55155.96255260192.60155.5526026192.65155.1526527192.70155.7527027192.75155.3427528192.801554.9428028192.901554.1329029192.95155.332951193.00155.3330030	192.45	1557.77	245	
192.601556.5526026192.651556.152651192.701555.7527027192.751553.342751192.801554.5428028192.901554.1329029192.951553.732951193.001553.3330030	192.50	1557.36	250	25
192.65 155.15 265 270 192.70 155.75 270 27 192.75 155.34 275 28 192.80 1554.94 280 28 192.95 1554.13 290 29 192.95 153.73 295 29 193.00 1553.33 300 30	192.55	1556.96	255	
192.70155.7527027192.75155.342751192.80155.9428028192.851554.542851192.901554.7329029192.951553.732951193.001553.3330030	192.60	1556.55	260	26
192.75155.34275Image: constraint of the sector of the sec	192.65	1556.15	265	
192.80 1554.94 280 28 192.85 1554.54 285 - 192.90 1554.13 290 29 192.95 1553.73 295 - 193.00 1553.33 300 30	192.70	1555.75	270	27
192.85 1554.54 285 192.90 1554.13 290 29 192.95 1553.73 295 - 193.00 1553.33 300 30	192.75	1555.34	275	
192.90 1554.13 290 29 192.95 1553.73 295 (1) 193.00 1553.33 300 300	192.80	1554.94	280	28
192.95 1553.73 295 193.00 1553.33 300 30	192.85	1554.54	285	
193.00 1553.33 300 30	192.90	1554.13	290	29
	192.95	1553.73	295	
102.05 1552.02 205	193.00	1553.33	300	30
173.03 1332.73 303	193.05	1552.93	305	
193.10 1552.52 310 31	193.10	1552.52	310	31
193.15 1552.12 315	193.15			
193.20 1551.72 320 32				32
193.25 1551.32 325				
193.30 1550.92 330 33				33
193.35 1550.52 335				





CHANNEL PLAN

Channel (nm)	Frequency (THz)	50GHZ GRID CHANNEL NUMBER	100GHZ-200GHZ GRID CHANNEL NUMBER
193.40	1550.12	340	34
193.45	1549.72	345	
193.50	1549.32	350	35
193.55	1548.91	355	
193.60	1548.51	360	36
193.65	1548.11	365	
193.70	1547.72	370	37
193.75	1547.32	375	
193.80	1546.92	380	38
193.85	1546.52	385	
193.90	1546.12	390	39
193.95	1545.72	395	
194.00	1545.32	400	40
194.05	1544.92	405	
194.10	1544.53	410	41
194.15	1544.13	415	
194.20	1543.73	420	42
194.25	1543.33	425	
194.30	1542.94	430	43
194.35	1542.54	435	
194.40	1542.14	440	44
194.45	1541.75	445	
194.50	1541.35	450	45
194.55	1540.95	455	
194.60	1540.56	460	46
194.65	1540.16	465	
194.70	1539.77	470	47
194.75	1539.37	475	
194.80	1538.98	480	48
194.85	1538.58	485	
194.90	1538.19	490	49
194.95	1537.79	495	
195.00	1537.40	500	50
195.05	1537.00	505	



CHANNEL PLAN

Channel (nm)	Frequency (THz)	50GHZ GRID CHANNEL NUMBER	100GHZ-200GHZ GRID CHANNEL NUMBER
195.10	1536.61	510	51
195.15	1536.22	515	
195.20	1535.82	520	52
195.25	1535.43	525	
195.30	1535.04	530	53
195.35	1534.64	535	
195.40	1534.25	540	54
195.45	1533.86	545	
195.50	1533.47	550	55
195.55	1533.07	555	
195.60	1532.68	560	56
195.65	1532.29	565	
195.70	1531.90	570	57
195.75	1531.51	575	
195.80	1531.12	580	58
195.85	1530.72	585	
195.90	1530.33	590	59
195.95	1529.94	595	
196.00	1529.55	600	60
196.05	1529.16	605	
196.10	1528.77	610	61
196.15	1528.38	615	
196.20	1527.99	620	62
196.25	1527.60	625	
196.30	1527.22	630	63
196.35	1526.83	635	
196.40	1526.44	640	64
196.45	1526.05	645	