



The CWDM (Mux-Demux) Passive

DMPCWxxxxxxxxxx

DESCRIPTION

In this type of systems, first, the number of optical channels increased to 4 and then to 8 channels. The inter-channel distance is also reduced to 20nm too. The first prototype of multiplex systems for dividing the wavelength in 20nm wavelength was built in the first years of 1990s. The wavelengths and the inter-channel distances of CWDM systems have been specified in the ITU-TG.694.2 recommendations.

According to this recommendation letter, 18 optical channels in 1271nm wavelength to 1611nm wavelengths in the 20nm interchange distances have been specified. In addition, in this recommendation, 7 ± 6 nm wavelength variation for the optical sources in such systems has been authorized.

Today, such systems in the 8-channel type in the window 1550 are built from 1470nm wavelength to 1610nm wavelength. Furthermore; fewer common types have also been built in 1310nm window from 1310 nm to 1450 nm wavelength as well.

Part number structure			
Number of wavelength and wavelength in use	Part number	Number of wavelength and wavelength in use	Part number
(1590-1550) CWDM 3+1	DMPCW301550590	(1610-1470) CWDM 8+1	DMPCW801470610
(1330-1270) CWDM 4+1	DMPCW401270330	(1610-1470) CWDM 8	DMPCW800470610
(1490-1430) CWDM 4+1	DMPCW401430490	(1610-1430) CWDM10+1	DMPCW101430610
(1530-1470) CWDM 4+1	DMPCW401470530	(1610-1410) CWDM 11+1	DMPCW111410610
(1610-1550) CWDM 4+1	DMPCW401550610	(1610-1390) CWDM 12+1	DMPCW121390610
(1610-1510) CWDM 6+1	DMPCW601510610	(1610-1370) CWDM13+1	DMPCW131370610
(1590-1470) CWDM 7+1	DMPCW701470590	(1610-1290) CWDM17+1	DMPCW171290610
(1610-1490) CWDM 7+1	DMPCW701490610	(1610-1270) CWDM1*18	DMPCW180270610
(1410-1270) CWDM 8+1	DMPCW801270410		

Optical WDM Data sheet											
CWDM-17CH-MUX/DEMUX		part number: DMPCW171290610									
Parameter		DMPCWxxxxxxxx									
Operating Wavelength(nm)		MUX	1290	1310	1330	1350	1370	1390	1410	1430	1450
Insertion Loss(dB)		<2.5	1.27	1.84	1.8	1.61	1.58	1.26	1.15	1.84	1.46
Operating Wavelength(nm)			1470	1490	1510	1530	1550	1570	1590	1610	EXP
Insertion Loss(dB)		<2.5	1.14	1.77	1.3	1.43	1.42	1.49	1.24	1.16	1.25
Operating Wavelength(nm)		DEMUX	1290	1310	1330	1350	1370	1390	1410	1430	1450
Insertion Loss(dB)		<2.5	1.94	1.46	1.14	1.94	1.85	1.54	1.48	1.26	1.74
Operating Wavelength(nm)			1470	1490	1510	1530	1550	1570	1590	1610	EXP
Insertion Loss(dB)		<2.5	1.59	1.24	1.57	1.44	1.35	1.42	1.27	1.29	1.65
Channel Ripple(dB)		<0.3									
Polarization Dependent Loss(dB)		<0.10									
PMD (ps)		<0.10									
Isolation	Adjacent(dB)	>30									
	Non-adjacent(dB)	>45									
Directivity(dB)		>50									
Return Loss(dB)		>45									
Fiber length(m)		0.5									
Fiber Type		SMF-28e with 900um Loose Tube									
connector		LC/UPC									
Operating Temperature(centigrade)		-20~+70									
Storage Temperature(centigrade)		-40~+85									
Package Dimension(mm)		140*115*18									