

Microwave Photonic Systems, Inc. 888-868-8967

MPS-2900 Dense Wavelength Division Multiplexer

- Micro-Optics Based Design
- Epoxy Free Optical Path
- Low Insertion Loss
- High Isolation
- Environmentally Stable
- Injection Molded Case



Description:

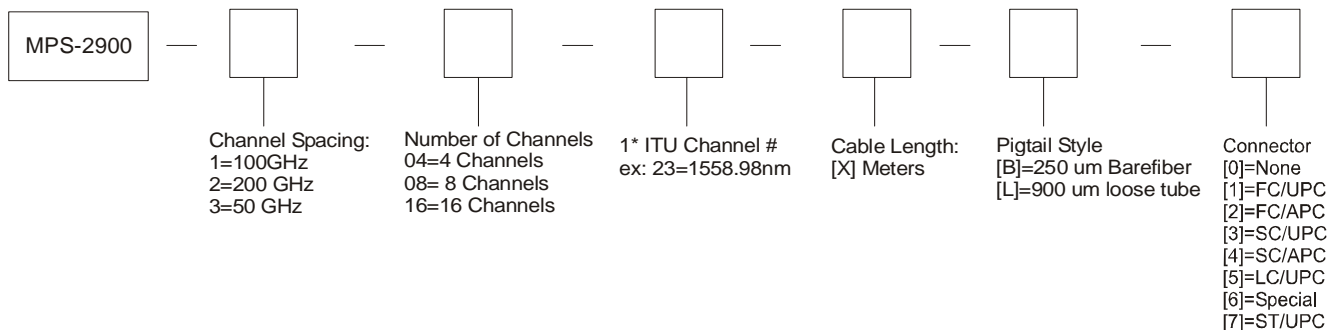
The MPS-2900 Singlemode Dense Wavelength Division Multiplexer (DWDM) provides a cost effective solution, for increasing fiber optic network signal capacity by enabling the simultaneous transmission of eight wavelengths over the same common fiber. That is, the MPS-2900 works in such a way as to MUX or DeMUX optical signals within the C and L band windows. The optical channel wavelengths correspond to the standard ITU grid and are available with either 100 or 200 GHz spacings.

The DWDM utilizes a micro-optic filter based technology to provide high performance, excellent environmental and mechanical stability in a compact package. Refer to Page (2) for detailed specifications. The MPS-2900 is available in a ruggedized composite package with fiber pigtail configurations including 250 μ m, 900 μ m buffered leads supplied with or without connectors.

Applications:

- CATV Fiber Links
- Long Haul/Suscriber Loops
- FTTX
- EDFA
- RF/ Fiber Optic Links

Part Number Generator:



SM OPTICAL DENSE WAVELENGTH DIVISION MULTIPLIER



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Note1: All Values specified are without connectors.

Note2: Higher performance specifications upon request.

Note3: Fiber Type – Corning SMF-28 unless otherwise specified.

Note4: 4 and 16 channels specifications available on request

Specifications:

Parameter	100GHz	200GHz
Central Wavelength	ITU grid (8 channels)	
Channel Pass Band @ -0.5 dB	ITU \pm 0.11 nm min.	ITU \pm 0.25 nm min.
Insertion loss	\leq 3.5dB typ, 4.5dB max	\leq 2.5dB typ, 3.5dBmax
Uniformity	\leq 1.5 dB	
Passband Ripple	\leq 0.5 dB	
Wavelength Temperature Sensitivity	\leq 1 pm/ $^{\circ}$ C	\leq 2 pm/ $^{\circ}$ C
Insertion Loss Temperature Sensitivity	\leq 0.005 dB/ $^{\circ}$ C	
Adjacent Channel Isolation	\geq 25 dB(demux)	
Non-adjacent Channel Isolation	\geq 40 dB	
Directivity	\geq 50 dB	
Return Loss	\geq 45 dB	
PDL	\leq 0.20 dB	\leq 0.15 dB
PMD	\leq 0.10 ps	
Maximum Power Handling	300 mW	
Operating Temperature	0 $^{\circ}$ C ~ +65 $^{\circ}$ C	
Storage Temperature	minus 40 deg C to +85 deg C	
Package Dimension	125.0 x 107 x 7.0 mm	

