2925
DWDM

Passive Components

The Emcore Model 2925 Dense Wave Division Multiplexing (DWDM) is an all fiber bidirectional multiplexor / demultiplexor. The DWDM allows four, eight, 12, 16, 24 or 32 channels to be stacked in the 1550 nm regions of optical fiber for both unidirectional and bidirectional applications. The Model 2925 implements high channel-to-channel isolation to ensure that no interference occurs between channels in a bidirectional configuration.

DWDM technology increases the capacity of embedded fibers, allowing system growth without costly cable plant upgrades. The Model 2925 is an excellent choice for addressing the increased need for efficient and capable signal transmission.

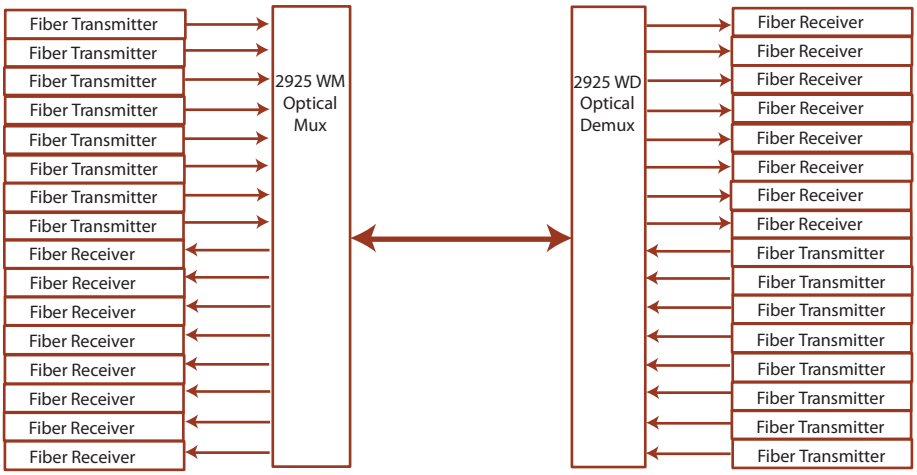
Features

- Low insertion loss
- Low polarization-dependednt loss
- Bi-directional capability
- High channel-to-channel uniformity
- Up to 32 ITU channels
- 1U Rack mountable package

Applications

- MDU
- CCTV
- Point to multi-point
- Tapped trunk
- Site diversity

Functional Diagram



General

Specifications	Values
Dimensions	11.9"D x 19"W x 1.75"H
Weight	5.5 lbs
Operating Temperature	-40° to +75°C
Storage Temperature	-45°C to +85°C
Humidity	0 to 95% non-condensing

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ITU Channel Plan

Channel #	Wavelength	4-Way	8-Way	12-Way	16-Way	24-Way	32-Way
21	1560.61 nm	-	-	-	-	X	X
22	1559.79 nm	X	X	X	X	X	X
23	1558.98 nm	X	X	X	X	X	X
24	1558.17 nm	X	X	X	X	X	X
25	1557.36 nm	X	X	X	X	X	X
26	1556.56 nm		X	X	X	X	X
27	1555.75 nm		X	X	X	X	X
28	1554.94 nm		X	X	X	X	X
29	1554.13 nm		X	X	X	X	X
30	1553.33 nm			X	X	X	X
31	1552.52 nm			X	X	X	X
32	1551.72 nm			X	X	X	X
33	1550.92 nm			X	X	X	X
34	1550.12 nm				X	X	X
35	1549.32 nm				X	X	X
36	1548.51 nm				X	X	X
37	1547.72 nm				X		
38	1546.92 nm						
39	1546.12 nm						
40	1545.32 nm						
41	1544.53 nm						X
42	1543.73 nm						X
43	1542.94 nm						X
44	1542.14 nm						X
45	1541.35 nm						X
46	1540.56 nm						X
47	1539.77 nm						X
48	1538.98 nm						X
49	1538.19 nm						X
50	1537.40 nm						X
51	1536.61 nm						X
52	1535.82 nm						X
53	1535.04 nm						X
54	1534.25 nm						X
55	1533.47 nm						X
56	1533.47 nm						X

Optical Specifications

Parameter	Min	Max	Units
Insertion Loss 4-Way 8-Way 12-Way 16-Way 24-Way 32-Way	 2.0 3.6 4.4 5.2 6.6 7.5	 2.4 4.5 5.3 5.8 7.5 8.5	dB
Channel uniformity 4-Way 8-Way 12-Way 16-Way 24-Way 32-Way	 - - - - - -	 1.2 1.5 1.5 1.5 1.5 1.5	dB
Isolation Adjacent Channel	25	-	dB
Isolation Non-Adjacent Channel	40	-	dB
PLD	-	0.1	dB
PMD	-	0.1	ps
Directivity	55	-	dB
Return Loss	45	-	dB
Optical Power		250	mW
Optical Power		24	dBm

Models

	Description
2925WM-SDSP/04	4-Channel DWDM, Mux, SC/APC, (Ch# 22-25)
2925WM-SDAP/04	4-Channel DWDM, Mux FC/APC, (Ch# 22-25)
2925WD-SDSP/04	4-Channel DWDM, DeMux SC/APC, Ch# 22-25)
2925WD-SDAP/04	4-Channel DWDM, DeMux FC/APC, (Ch# 22-25)
2925WM-SDSP/08	8-Channel DWDM, Mux, SC/APC, (Ch# 22-29)
2925WM-SDAP/08	8-Channel DWDM, Mux FC/APC,(Ch# 22-29)
2925WD-SDSP/08	8-Channel DWDM, DeMux SC/APC, Ch# 22-29)
2925WD-SDAP/08	8-Channel DWDM, DeMux FC/APC, (Ch# 22-29)
2925WM-SDSP/12	12-Channel DWDM, Mux, SC/APC, (Ch# 22-33)
2925WM-SDAP/12	12-Channel DWDM, Mux FC/APC, (Ch# 22-33)
2925WD-SDSP/12	12-Channel DWDM, DeMux SC/APC, (Ch# 22-33)
2925WD-SDAP/12	12-Channel DWDM, DeMux FC/APC, (Ch# 22-33)
2925WM-SDSP/16	16-Channel DWDM, Mux, SC/APC, (Ch# 22-37)
2925WM-SDAP/16	16-Channel DWDM, Mux FC/APC, (Ch# 22-37)
2925WD-SDSP/16	16-Channel DWDM, DeMux SC/APC, (Ch# 22-37)
2925WD-SDAP/16	16-Channel DWDM, DeMux FC/APC, (Ch# 22-37)
2925WM-SDSP/24	24-Channel DWDM, Mux, SC/APC, (Ch# 21-36, 41-48)
2925WM-SDAP/24	24-Channel DWDM, Mux FC/APC, (Ch# 21-36, 41-48)
2925WD-SDSP/24	24-Channel DWDM, DeMux SC/APC, (Ch# 21-36, 41-48)
2925WD-SDSA/24	24-Channel DWDM, DeMux FC/APC, (Ch# 21-36, 41-48)
2925WM-SDSP/32	32-Channel DWDM, Mux, SC/APC, (Ch# 21-36, 41-56)
2925WM-SDAP/32	32-Channel DWDM, Mux FC/APC, (Ch# 21-36, 41-56)
2925WD-SDSP/32	32-Channel DWDM, DeMux SC/APC, (Ch# 21-36, 41-56)
2925WD-SDAP/32	32-Channel DWDM, DeMux FC/APC, (Ch# 21-36, 41-56)

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