

## Model OT-SWDM-U Ultra High Isolation SM Fiber Wavelength Division Multiplexer

### Features / Benefits



### APPLICATIONS

- Multiplexing/Demultiplexing
- Fiber Optic CATV
- Fiber Optic Test Equipment
- Bi-directional Communication Over a Single Fiber
- Double System Capacity Over a Single Fiber
- Line Relay Equipment

### FEATURES

- All Fiber Construction
- High Reliability
- Outstanding Optical Performance
- Available for 1310 nm and 1550 nm

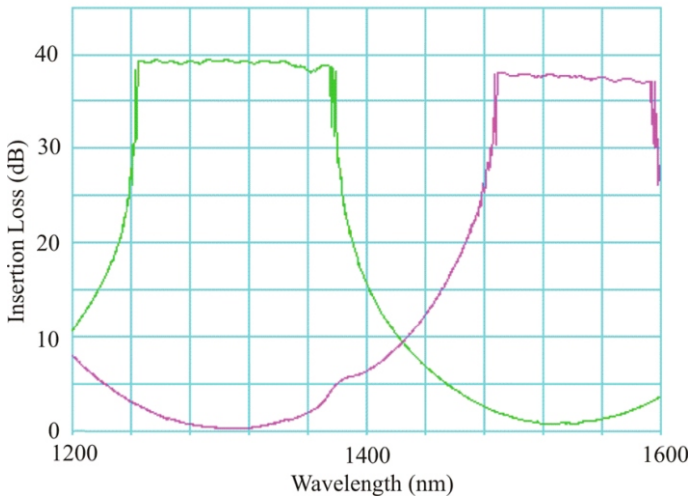
### Operating Specifications

Parameter	Units	Specification
Center Wavelength ( $\lambda_c$ )	nm	1310 or 1550
Bandwidth	nm	$\pm 20$
Max. Insertion Loss	dB	1.1
Min. Wavelength Isolation	dB	30
Min. Isolation in 80 nm BW	dB	45
Typ. Isolation in 10 nm BW	dB	60
Max. Polarization Stability	dB	0.2
Min. Directivity	dB	55
Max. Temperature Coefficient	dB/°C	0.004
Operating Temperature	°C	-20 to +75
Storage Temperature	°C	-40 to +85
Package Dimensions	mm	O: 100 x 80 x 9 L: 120 x 80 x 18

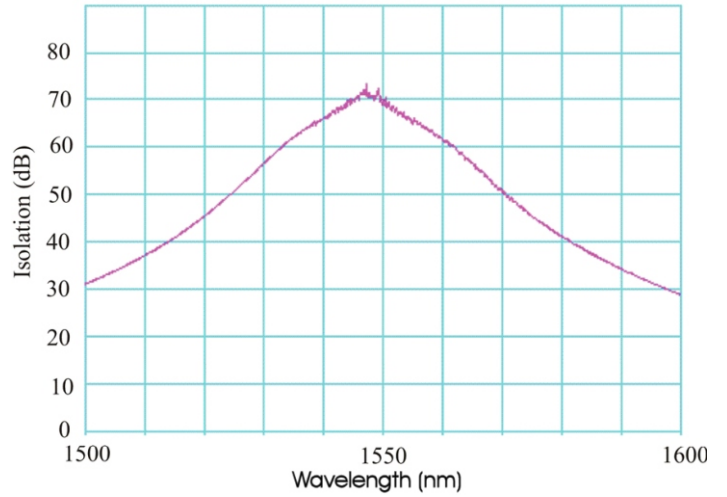
### Qualifications and Reliability Tests

Dry Heat	85 $\pm$ 2°C for 5000 Hours
Damp Heat	75 $\pm$ 2°C/90 $\pm$ 5% RH for 5000 Hours
Low Temp. Storage	-40 $\pm$ 5°C for 5000 Hours
Water Immersion	43 $\pm$ 2°C and PH 5.5 $\pm$ 0.5 for 168 Hours
Temp Cycling	-40 $\pm$ 2°C to 85 $\pm$ 2°C for 500 cycles
Vibration	10 Hz to 2000 Hz, 1.52 mm max. amplitude, 3 axes, 2 hours per axis
Impact Test	1.8 m, 3 axes, 8 times per axis

Wavelength Dependence of Insertion Loss



Isolation near 1550nm



### Ordering Information

OT — SWDM — U — 1315 — A — 9 —  —  —  —

Package (mm)  
 O = 100 x 80 x 9  
 L = 120 x 80 x 18  
 Z = Olson OTCP Housing

Pigtail  
 1 = 0.9 mm Tight Buffer  
 3 = 3 mm Cable  
 00 = Receptacle (Package L Only)

Pigtail Length  
 05 - 99 = 0.5 - 9.9 Meters  
 00 = Receptacle (Package L Only)

Connector  
 FA = FC/APC  
 SA = SC/APC