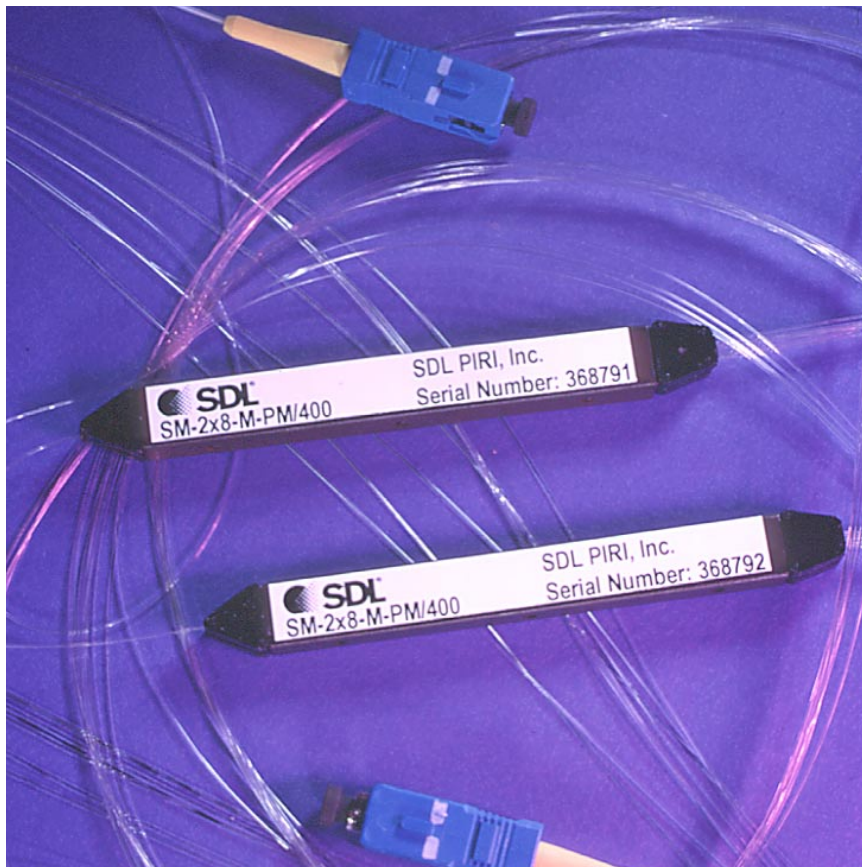


SDL PIRI

P-CORE SERIES**FEATURES**

- *Single-mode*
- *Up to 8 outputs standard*
- *Wavelength and polarization independent*
- *Available in 1 x n or 2 x n configurations*

APPLICATIONS

- *Fiber optic equipment & systems (OEM)*
- *DWDM systems*

Polarization maintaining splitters

Polarization maintaining single-mode optical power splitters, available in 1 x n and 2 x n configurations, divide optical signals uniformly from input ports to multiple outputs. PANDA fibers are typically used, but other PM fibers are available. SDL PIRI provides devices with extinction ratios up to 24 dB, with 2, 4, or 8 output ports. These devices can be operated in the reverse direction to com-

bine multiple wavelengths onto 1 or 2 fibers. Optical power splitting is performed by use of planar silica glass optical waveguide chips integrated with cascaded y-branches. Advantages of planar-type devices are high uniformity, low insertion loss, broadband performance over both 1310 nm and 1550 nm windows, compact size and environmentally stable compact packaging.



Polarization Maintaining Splitters Performance

Model Number						
	SM-1x2-	SM-2x2-	SM-1x4-	SM-2x4-	SM-1x8	SM-2x8-
	M-PM/400	M-PM/400	M-PM/400	M-PM/400	M-PM/400	M-PM/400
	Circuit					
	1 x 2	2 x 2	1 x 4	2 x 4	1 x 8	2 x 8
Characteristics						
Insertion Loss ¹						
Typical	≤4.0 dB	≤4.6 dB	≤0.7 dB	≤7.3 dB	≤10.3 dB	≤10.6 dB
Maximum	≤4.6 dB	≤5.1 dB	≤7.9 dB	≤8.4 dB	≤11.3 dB	≤11.8 dB
Uniformity ²	≤0.6 dB	≤1.3 dB	≤1.1 dB	≤1.5 dB	≤1.0 dB	≤1.7 dB
Uniformity ² w/connect	≤0.9 dB	≤1.6 dB	≤1.1 dB	≤1.8 dB	≤1.3 dB	≤2.0 dB
Extinction Ratio ³			Grade A+: better than 24 dB Grade A: better than 20 dB			
Return Loss		Better than 55 dB w/o connectors, ≥35 dB w/connectors depending on type				
Directivity		Better than 55 dB				
Operating Wavelength		1310/1550 nm				
Pigtails		Standard: 400 μm O.D. PM fiber (Fujikura PANDA) Option 1: 400μm O.D. PM fiber w/900 μm loose tube buffer Option 2: Connectorized w/(FC, SC, LC, ST) ³ Polish–SPC/APC				
Nominal Case Size ⁴						
(L x W x H mm)		75x9.5x6.0				

Notes

- 1. For devices with connectors add 0.6 dB to loss values (0.3 dB/connector).
- 2. Uniformity: Loss difference between maximum and minimum output ports.
- 3. Extinction Ratio (ER) measured for bare fibers; connectorization may reduce ER.
- 4. Rubber strain relief adds 9 mm length to each end.

Options:

Other types of PM fiber pigtails may be available.

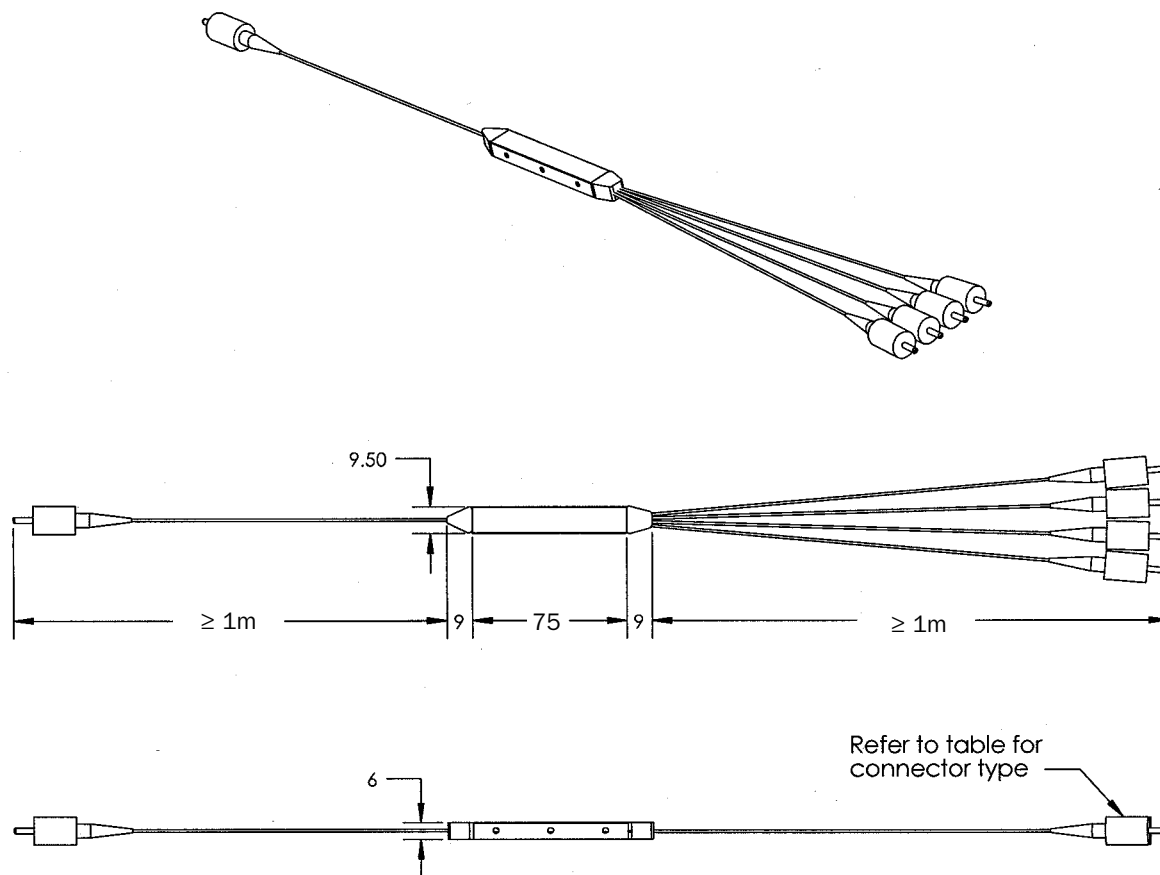
Option 1: Typical part number SM-2x8-M-PM/400-900

Option 2: Typical part number SM-2x8-M-PM/400-FC/APC

August 1, 2000

Specifications subject to change without notice.

Outline Drawing



Notes:
 Fiber lengths not to scale.
 All dimensions in mm. Tolerance = $\pm 0.1\text{ mm}$,
 Angle = $\pm 0.2^\circ$. (Unless otherwise specified)

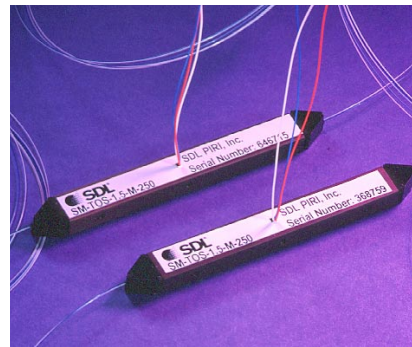
Products available from SDL PIRI



Arrayed waveguide grating multiplexer



Frequency division multiplexer



Thermo-optic switches



Polarization maintaining splitters



Single-mode splitters



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