

SERIES 100

POWER MONITORS FOR POLARIZATION MAINTAINING FIBER Integral Optical Tap and Photodiode



GR-468
Telcordia Qualified

EigenLight's PM Series 100 Inline Power Monitors are used for monitoring optical power in polarization maintaining fiber. By combining a stable optical tap and PIN photodiode in a miniature, hermetic package, these PM devices offer cost and performance advantages over discrete PM coupler and photodiode combinations.

FEATURES

- Extinction Ratio >23 dB
- Low Insertion loss
- Return loss >70 dB
- High Power capability
- Available fiber types: Panda 1550, 1310, 980
- Operating temperature range -5 C to +75C

APPLICATIONS

- Optical Transmitters
- Fiber Lasers
- Test Instrumentation
- Fiber Sensors

SPECIFICATIONS¹

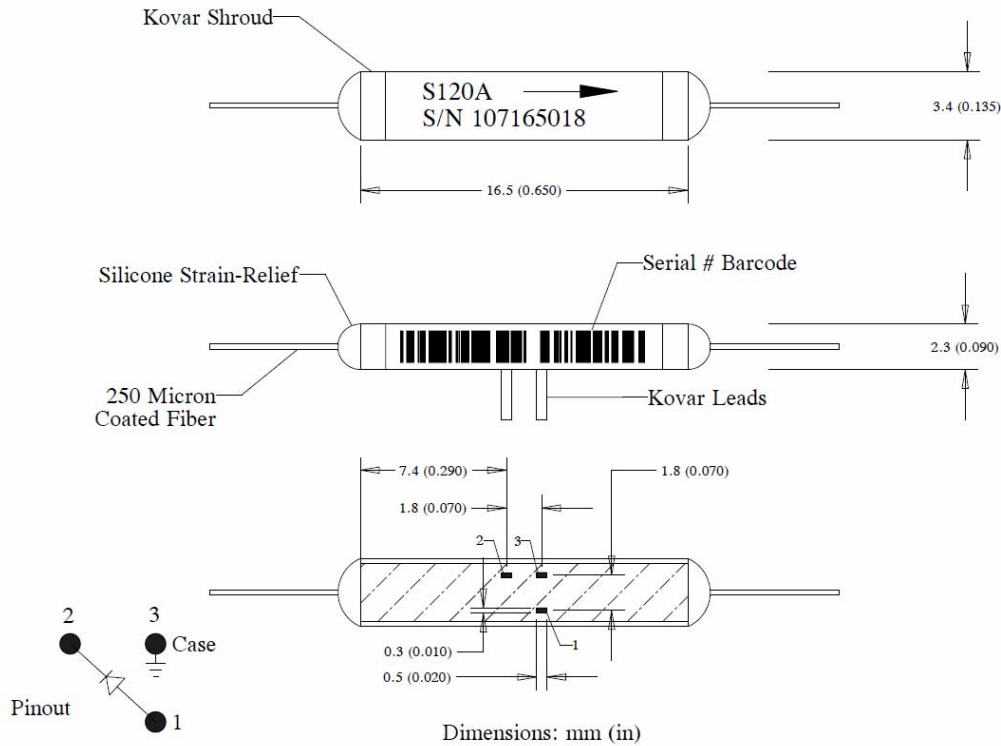
PARAMETER	M10X	M12X	M14X	M16X
Insertion Loss	<0.4 dB	<0.2 dB	<0.1 dB	<0.05 dB
Responsivity ² (mA/Watt) X=6,7	35 – 60 20 – 40	15 – 35 10 - 20	5 – 15 3 - 10	1 – 5 0.5 - 3
Extinction Ratio (dB)	>23	>23	>23	>23
Optical Return Loss (dB)	>70	>70	>70	>70
Directivity ³ (dB)	>30	>20	>15	>10
Wavelength Range x = 2,3	1540-1610 nm			
x = 4,5	1290-1380 nm			
x = 6,7	970-1100 nm			
Max. Optical Power (dBm)	+16	+18	+22	+26
Fiber Type ⁴	Panda	Panda	Panda	Panda
Dark Current @ -5 V, 23 C	<1 nA			
3 dB Bandwidth @ -5 V (MHz)	>200			
Capacitance (pF)	<10			
Max. Forward Current (mA)	10			
Max. Reverse Current (mA)	5			
Max. Reverse Voltage (V)	10			
Operating Temperature	-5°C to +75°C			
Storage Temperature	-40°C to +85°C			

1. Custom specifications available upon request
2. Ratio of photocurrent to optical power in fiber (measured at the output)
3. Sensitivity to forward directed light relative to backward directed light.
4. Other fiber types available

SERIES 100 POWER MONITORS FOR POLARIZATION MAINTAINING FIBER

Integral Optical Tap and Photodiode

Dimensional Specifications



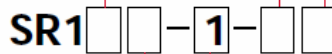
Ordering Information

Responsivity (mA/Watt)

- 0 = 35-60, 20-40 (PM 980)
- 2 = 15-35, 10-20 (PM980)
- 4 = 5-15, 3-10 (PM980)
- 6 = 1-5, 0.5-3 (PM980)

Connector Type

See Table



Fiber Type

- 2 = Panda 1550 250 micron
- 3 = Panda 1550 900 micron loose tube
- 4 = Panda 1310 250 micron
- 5 = Panda 1310 900 micron loose tube
- 6 = Panda 980 250 micron
- 7 = Panda 980 900 micron loose tube

Fiber Pigtail Length

1 Meter Standard

CONNECTOR TABLE¹

Code	Connector Type
10	FC
15	FC/APC

1. Slow-axis alignment standard

