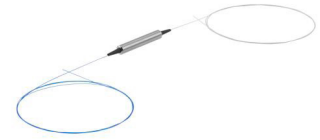


Passive PM Single Stage Isolator, Grade P, 1550nm, 1 meter 250um bare fiber



PPMSI-P55-12N

Features

- Polarized Maintaining fiber
- polarization dependent
- Single Stage, grade P
- 1 meter, no connectors
- Low insertion loss
- High isolation
- High stability and reliability

Applications

- Optical Amplifier
- EDFA
- Communication Networks
- Fiber Sensors
- Coherent Dedection
- Research and Development
- Power Monitoring

Description

Elevate your optical systems to new heights with the PPMSI-P55-12N, a passive polarization dependent isolator with Polarized Maintaining fiber designed to deliver exceptional performance. Categorized as a grade P (Premium) Single Stage isolator, it is the ideal choice for protecting light sources from back reflections and signal noise, ensuring precision and reliability in your optical systems. With a compact 35mm size and a 1550nm wavelength, it provides the critical characteristics needed for demanding optical tasks.

One notable feature of the L-com PPMSI-P55-12N is its polarization dependent design, making it a reliable option for maintaining the integrity of polarized light, minimizing feedback and backscatter into optical systems. It comes without connectors at both ends, offering flexibility in your optical configuration. Furthermore, the 250um bare fiber ensures seamless integration into various setups.

This isolator is packed with essential features, including low insertion loss, high isolation, low PDL (Polarization-Dependent Loss), and outstanding stability and reliability. These features collectively guarantee that your optical systems operate at peak performance, with minimal signal loss, high isolation, and consistent results over time.

Whether you're working in optical amplification, communication networks, fiber sensing, coherent detection, research and development, or power monitoring, L-com's PPMSI-P55-12N is your trusted partner. Its versatility and quality make it a go-to choice for professionals seeking precision and excellence in PM polarized dependent optical isolators.

Experience the difference that the L-com PPMSI-P55-12N can bring to your optical projects and systems. It empowers you to achieve superior results, ensuring the highest standards of performance, stability, and reliability in your optical applications. Other configurations are available upon request, if you do not see the configuration, you are looking for, please contact our expert technical support.

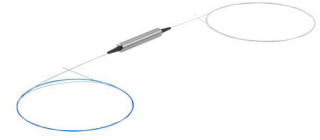
Configuration

Mode	Polarized Maintaining
Module Function	Isolator
Fiber Type	250um bare fiber
Fiber Diameter	250um
Package	5.5x35mm
Stage	Single Stage
Grade	Grade P

Filter Specifications

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications:
[Passive PM Single Stage Isolator, Grade P, 1550nm, 1 meter 250um bare fiber PPMSI-P55-12N](#)

Passive PM Single Stage Isolator, Grade P, 1550nm, 1 meter 250um bare fiber



PPMSI-P55-12N

Description	Minimum	Typical	Maximum	Units
Operating Wavelength	1530	1550	1570	nm
Extinction Ratio	20			dB
Insertion Loss		0.4	0.55	dB
Return Loss	55			dB
Isolation	28	42		dB
Optical Power			300	mW

Size

Length	39.37 in [100 cm]
Weight	0.25 lbs [113.4 g]

Environmental Specifications

Temperature

Operating Range	-5 to +70 deg C
Storage Range	-40 to +85 deg C

Compliance Certifications (see [product page](#) for current document)

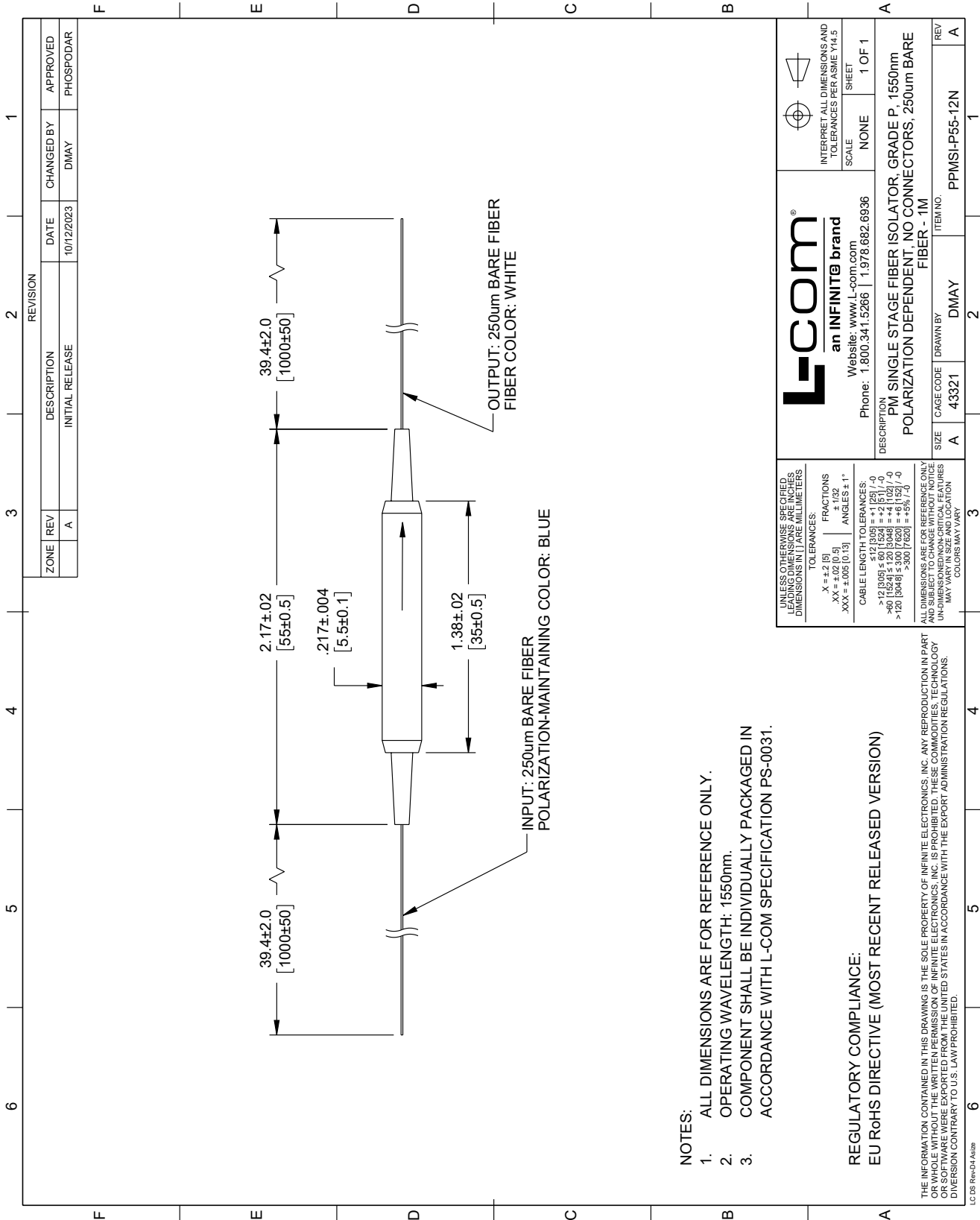
Plotted and Other Data

Notes:

Passive PM Single Stage Isolator, Grade P, 1550nm, 1 meter 250um bare fiber from L-com has same day shipment for domestic and International orders. Our portfolio includes coaxial cable assemblies, connectors, adapters and custom products as well as lightning and surge protectors, NEMA rated enclosures, and an RF product line which includes antennas, amplifiers, passive, and active components.

The information contained within this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part in order to impliment improvements. L-com reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. L-com does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and L-com does not assume liability arising out of the use of any part or document.

PPMSI-P55-12N CAD Drawing



NOTES:

1. ALL DIMENSIONS ARE FOR REFERENCE ONLY.
2. OPERATING WAVELENGTH: 1550nm.
3. COMPONENT SHALL BE INDIVIDUALLY PACKAGED IN ACCORDANCE WITH L-COM SPECIFICATION PS-0031.

REGULATORY COMPLIANCE:
EU RoHS DIRECTIVE (MOST RECENT RELEASED VERSION)

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF INFINITE ELECTRONICS, INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF INFINITE ELECTRONICS, INC. IS PROHIBITED. THIS DRAWING OR SOFTWARE WERE EXPORTED FROM THE UNITED STATES IN ACCORDANCE WITH THE EXPORT ADMINISTRATION REGULATIONS. DIVERSION CONTRARY TO U.S. LAW PROHIBITED.

LC-DB Rev-D-A328

ZONE		REVISION	
A	REV	DESCRIPTION	DATE
A		INITIAL RELEASE	10/12/2023
	CHANGED BY	APPROVED	
	DMAY	PHOSPODAR	

<p>L-com an INFINITE brand</p> <p>Website: www.L-com.com</p> <p>Phone: 1.800.341.5266 1.978.682.6936</p>	<p>INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5</p>
	<p>SCALE: NONE</p> <p>SHEET: 1 OF 1</p>
<p>DESCRIPTION: PM SINGLE STAGE FIBER ISOLATOR, GRADE P, 1550nm POLARIZATION DEPENDENT, NO CONNECTORS, 250um BARE FIBER - 1M</p>	
<p>SIZE: A</p> <p>CAGE CODE: 43321</p> <p>DRAWN BY: DMAY</p>	<p>ITEM NO.: PPMSI-P55-12N</p> <p>REV: A</p>

UNLESS OTHERWISE SPECIFIED, DIMENSIONS IN L-COM DRAWINGS ARE IN MILLIMETERS

TOLERANCES:
X = ±0.25 [5]
.XX = ±0.02 [0.5]
.XXX = ±0.005 [0.13]

FRACTIONS: ±1/32
ANGLES: ±1°

CABLE LENGTH TOLERANCES:
>12 [305] ± 6 [1524] = ±2 [51] / -0
>60 [1524] ± 12 [3048] = ±4 [102] / -0
>120 [3048] ± 24 [6096] = ±8 [203] / -0
>300 [7620] ± 50 [1270] = ±5% / -0

ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SUBJECT TO CHANGE WITHOUT NOTICE UNLESS OTHERWISE SPECIFIED. UNDIMENSIONED NON-CRITICAL FEATURES MAY VARY. SOLDERS MAY VARY.