



IS4550 Series Miniature Reflective Single-Stage Isolators

The IS4550 Series single-stage polarization independent optical isolators are designed to provide high isolation in combination with very low insertion loss, polarization dependent loss (PDL) and polarization mode dispersion (PMD) over full temperature and wavelength ranges. Their excellent characteristics make them highly suitable for laboratory and field applications. They are packaged in an ultra-compact cylindrical steel package. The input and output arms of the isolator are located on the same side of the package, permitting space savings.

Key Features

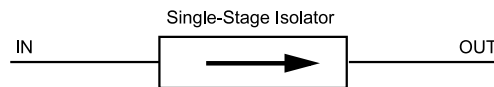
- For in-line use
- Compact size
- Low insertion loss
- Low PDL and PMD over entire temperature and wavelength ranges
- High isolation and return loss
- Designed for stable and highly reliable performance

Applications

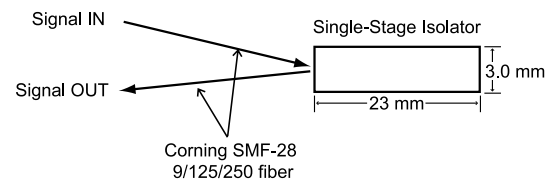
- Optical amplifiers
- CATV systems
- Fiber ring lasers
- Testing of light sources and components

Configuration

Functionality



Actual Configuration



Specifications

Parameter		Specification
Operating wavelength (λ)		1530 to 1570 nm
Typical insertion loss ¹	over λ , @23 °C	0.45 dB
Maximum insertion loss ¹	over λ , 0 to 60 °C all states of polarization	0.7 dB
Typical peak isolation		35 dB
Minimum isolation	over λ , 0 to 60 °C	23 dB
Maximum polarization dependent loss	over λ	0.10 dB
Maximum polarization mode dispersion	over λ	0.03 ps
Minimum return loss	over λ	50 dB
Maximum optical power		300 mW
Fiber type		9/125/250 μ m Corning SMF-28
Dimensions (cylindrical D x L)		3 x 23 mm
Operating temperature		0 to 60 °C
Storage temperature		-40 to 85 °C

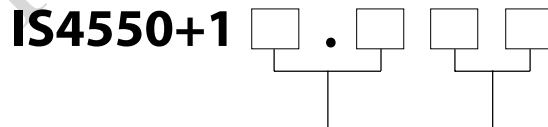
1. Measured without connectors.

Note: These specifications are applicable over operating temperature unless otherwise specified.

Ordering information

Indicate your requirements by selecting one option from each configuration table. Please print the corresponding codes in the available boxes to form your part number. For more information on this or other products and their availability, please contact your local JDS Uniphase sales representative or JDS Uniphase directly at 613 727-1303, or by fax 613 727-8284, or via email at sales@ca.jdsunph.com, or visit our Web site at www.jdsunph.com.

Sample: IS4550+11.0NC



Code	Typical Fiber Length (all ports)
0.5	0.5 meter
1.0	1.0 meter ¹
1.5	1.5 meters
2.0	2.0 meters

1. Standard.

Code	Connector Type (all ports)
NC	No connector ¹
FP	FC/PC
FA	FC/APC
SC	SC/PC
SU	SC/APC
SP	ST/PC

SMF-28 is a registered trademark of Corning Incorporated.



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