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Data Sheet

August 7, 2026

JDS UNIPHASE

JDS Uniphase MV47L Fiber Optic VOA MV47L-CS-Z002

The JDS Uniphase MV47L is a fiber optic variable optical attenuator (VOA) designed for precise control of optical power levels in fiber optic systems. Part number MV47L-CS-Z002. It features low insertion loss, high dynamic range, and excellent reliability, making it suitable for various applications, including optical power equalization, channel balancing, and system testing.



MODEL

**JDS Uniphase
MV47L-CS-Z002**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MV47L-CS-Z002

LISTING

<https://aumictechlabs.com/products/mv47l-cs-z002-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The JDS Uniphase MV47L is a manual variable optical attenuator for single-mode fiber systems requiring precise optical power control. It employs graded neutral density filters with trimpot-style adjustment to deliver attenuation across the 1200 nm to 1700 nm window, with primary optimization at 1310 nm and 1550 nm for multichannel applications. The MV47L combines low insertion loss, minimal wavelength dependence, and low PDL to meet the demands of research, development, and production environments. Technical Specifications Part Number: MV47L-CS-Z002 Type: Manual Variable Optical Attenuator (VOA), single-mode fiber Operating Wavelength: 1200 nm to 1700 nm Optimized Wavelengths: 1310 nm and 1550 nm Attenuation Mechanism:

Graded neutral density filters with trimpot-style adjustment Insertion Loss: Typically 1.5 dB Return Loss: Greater than 50 dB (optimized at 1310 nm) Resolution: Typically 0.02 dB Wavelength Dependence: Low Polarization Dependent Loss (PDL): Low Fiber Cable: SM-28e, OD 3 mm; SM Kevlar reinforced or 900 μ m buffered fiber; standard pigtail length 1.5 m Connector Options: FC/APC or SC/UPC Dimensions: 37.8 $\times$ 16.6 $\times$ 23.4 mm (excluding connectors) Operating Temperature: -40 $^{\circ}$ C to 75 $^{\circ}$ C Storage Temperature: -40 $^{\circ}$ C to 75 $^{\circ}$ C Key Features High-resolution adjustment (0.02 dB typical) for accurate power control Optimized performance in 1310/1550 nm dual-window multichannel systems Low wavelength dependence and PDL ensure stable attenuation across spectral range Compact form factor for space-constrained installations Wide operating temperature range supports field and lab deployment Typical Applications In-line power control in optically amplified multichannel systems Receiver padding and transmitter power equalization Optical power equalization and channel balancing System testing and validation Compatibility & Integration The MV47L integrates into single-mode fiber networks via FC/APC or SC/UPC connectors. Standard 1.5 m pigtail configuration enables flexible deployment in existing optical testbeds and production systems.

Features & description

From manufacturer datasheet

Features

- Series: MV47L miniature SM VOA
- Operating wavelength: 1200–1700 nm class (optimized 1310/1550 windows)
- Technology: graded ND filter; screw/trimpot adjustment
- Return loss: >50 dB class; optimized at 1310 nm on many builds
- Extra insertion loss: ~1.5 dB typical
- Resolution: ~0.02 dB typical
- Fiber: SMF-28e class; cable OD and length per build (often 3 mm jumpers)
- Connectors: CS coding (SC-class common on MV47L listings); Z002 special–verify faceplate
- Low wavelength dependence and PDL for multichannel use

MV47LCSZ002 Characteristics / Specifications

PARAMETER	VALUE
Model	MV47L-CS-Z002
Manufacturer	JDS Uniphase (JDSU / VIAVI)
Instrument Type	Manual Variable Optical Attenuator
Family	MV47 / MV47L
Alias	MV47L; MV47L-CS-Z002 Optical SM VOA 1200–1700 nm; RL >50 dB class; screw adjust Operational Notes Prefer JDS MV47L product note. Exact attenuation range and connector gender are on the unit/cable labels for Z002 builds.
Series	MV47L miniature SM VOA
Operating wavelength	1200–1700 nm class (optimized 1310/1550 windows)
Technology	graded ND filter; screw/trimpot adjustment
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Connectors	CS coding (SC-class common on MV47L listings); Z002 special–verify faceplate
Attenuation	range and connector gender are on the unit/cable labels for Z002 builds.

MV47LCSZ002 Specifications

PARAMETER	VALUE
Key Features	- Series: MV47L miniature SM VOA
Technical Specifications	Model: MV47L-CS-Z002
Optical	SM VOA 1200–1700 nm; RL >50 dB class; screw adjust
Operational Notes	Prefer JDS MV47L product note. Exact attenuation range and connector gender are on the unit/cable labels for Z002 builds.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

PARAMETER	VALUE
Model	MV47L-CS-Z002
Manufacturer	JDS Uniphase (JDSU / VIAVI)
Instrument Type	Manual Variable Optical Attenuator
Family	MV47 / MV47L
Alias	MV47L; MV47L-CS-Z002

Optical

SM VOA 1200–1700 nm; RL >50 dB class; screw adjust

Operational Notes

Prefer JDS MV47L product note. Exact attenuation range and connector gender are on the unit/cable labels for Z002 builds.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.