

Variable Optical Attenuator

PN L-6001-VOAxx-1

DESCRIPTION

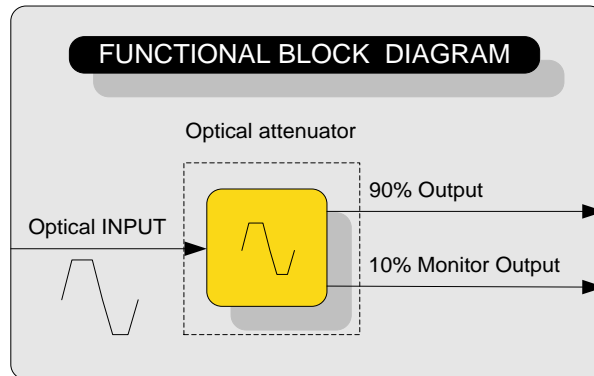
The VOAxx-1 is a Variable Optical Attenuator module that plugs in to the *XBERT* and *ParalleX™* Chassis. Versions for single mode (VOASx-1) and multimode (VOAMx-1) use are available, covering wavelength ranges of 1270-1350nm/1510-1590nm (SM), and 800-1000nm (MM). The module also incorporates a coupler with monitor output, allowing for simultaneous measurement of optical power. When used in the *XBERT* chassis with *EBERT*, Clock, XFP and power meter modules, users can perform receiver sensitivity tests with one instrument.



Variable Optical Attenuator Module L-6001-VOAxx-1

KEY FEATURES

- Modules for single-mode and multi-mode fiber
- L-6001-VOASA-1, Singlemode APC
- L-6001-VOASM-1, Singlemode PC
- L-6001-VOAMA-1, Multimode APC
- L-6001-VOAMM-1, Multimode PC
- Multi-mode 800 – 1000nm
- Single-mode 1270 – 1350nm/1510 – 1590nm
- Incorporates coupler with monitor output, for simultaneous optical power measurement
- LabView™ drivers available
- Small size: width 25.4mm (1")



XBERT PLATFORM: LETS YOU START SMALL AND GROW BIG

XBERT is a low-cost, modular Bit Error Rate Test Platform used for verification and test of 10Gb/s and above optical and electrical chip, sub assembly and system designs. *ParalleX™* allows users to perform several BER tests at once using a single clock source. The system is ideal for developers desiring to run simultaneous BER tests on parallel interfaces or multiple independent interfaces. *XBERT* and *ParalleX™* are scalable so users can start off with a single channel and add modules to grow the system. Manufacturers can realize great savings by taking advantage of the *XBERT* and *ParalleX™* system's scalability to perform parallel testing in volume production environments.

Variable Optical Attenuator L-6001-VOAxM-1

KEY PERFORMANCE PARAMETERS

PARAMETER VOA SINGLE MODE	SYMBOL	MIN	MAX	UNIT	NOTE
Fiber type	SMF 9/125 μ m				3)
Wavelength	λ	1270	1350	nm	
		1510	1590	nm	
Attenuation range	A	IL	55	dB	
Insertion loss	IL	1.35	2	dB	
Polarization dependant loss	PDL	0.15	0.55	dB	
Wavelength dependant loss	WDL	0.2	TBD	dB	1)
Attenuation step	ΔA	0.03		dB	
Repeatability of attenuation setting	R		TBD	dB	
Total error	E		1	dB	2)
Operating Temperature	TOP	0	40	$^{\circ}$ C	Ambient Temp.

1) within 30nm bandwidth

2) including PDL, WDL over all operating condition

3) polarization maintaining fibres on request

PARAMETER VOA MULTI MODE	SYMBOL	MIN	MAX	UNIT	NOTE
Fiber type	MMF 50/125 μ m				3)
Wavelength	λ	800	1000	nm	
Attenuation range	A	IL	40	dB	
Insertion loss	IL	1.35	2	dB	
Wavelength dependant loss	WDL	0.2	TBD	dB	
Attenuation step	ΔA	0.03		dB	
Repeatability of attenuation setting	R		TBD	dB	
Total error	E		1	dB	2)
Operating temperature	TOP	0	40	$^{\circ}$ C	Ambient Temp.

2) including WDL over all operating condition

3) 65 μ m fibres on request

Sensitivity measurement

When used in the XBERT chassis with EBERT, Clock, XFP/SFP+ and power meter modules, users can perform receiver sensitivity tests with one instrument. The optional LabView™ based Control Software provides automatic sensitivity measurements of ROSA (Receiver Optical Sub-Assembly) and receive sections of transceivers (XFP, SFP+ etc). The software is intended for automated test in mass production and offers pattern dependant and frequency dependant BER curves versus optical input power.

