

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

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Find the *Corning SD-10-A* at our website: ***Click HERE***

Corning® SD - 10 - A

CORNING
Discovering Beyond Imagination

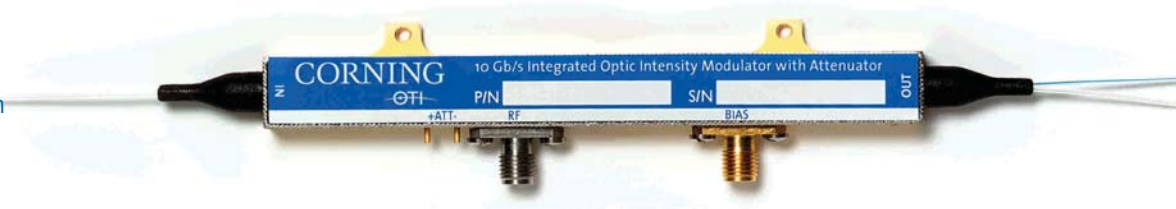


10 Gb/s - 12.5 Gb/s Integrated Optic Intensity Modulator

with Attenuator

Features

- Ti-diffused waveguides
- C&L band operation
- Hermetic package
- Electro-optic e/o bandwidth for up to 12.5 Gb/s modulation speed
- Chirp free
- Low insertion loss
- High extinction ratio
- Non periodic and monotonic attenuation characteristic
- Available with integrated photodiode option



Applications

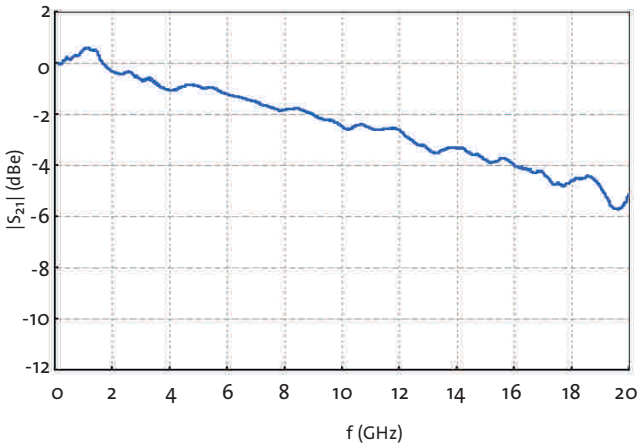
- SDH/SONET - DWDM systems
- LH and ULH systems
- FEC and SFEC Tx
- WDM channel pre-emphasis
- Accurate and automatic optical power level control
- Blind Tx startup

Corning OTI's Integrated Optic Intensity Modulators are based on a waveguide Mach-Zehnder Interferometer, manufactured using the Titanium indiffusion process in x-cut, y-propagating Lithium Niobate substrates. Corning OTI's 10 Gb/s Intensity Modulator with integrated variable optic attenuator enables highly flexible in DWDM system operation, giving possibility to pre-emphasize each channel.
Over the past decade, Corning OTI's customers have come to expect both excellent performance and World-Class reliability.
Suitable driver amplifiers are available through Corning OTI recommended partners.

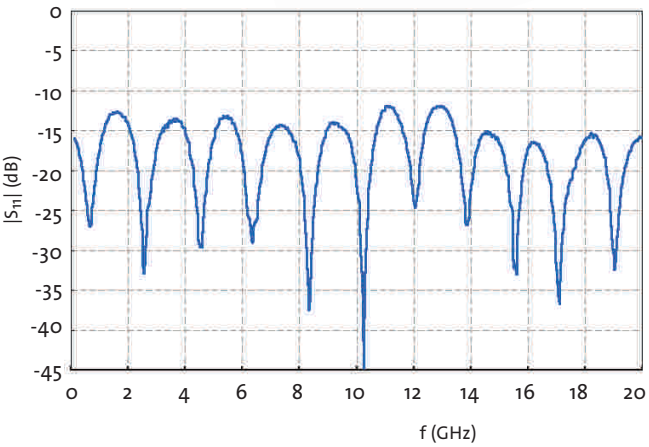
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Performance characteristics

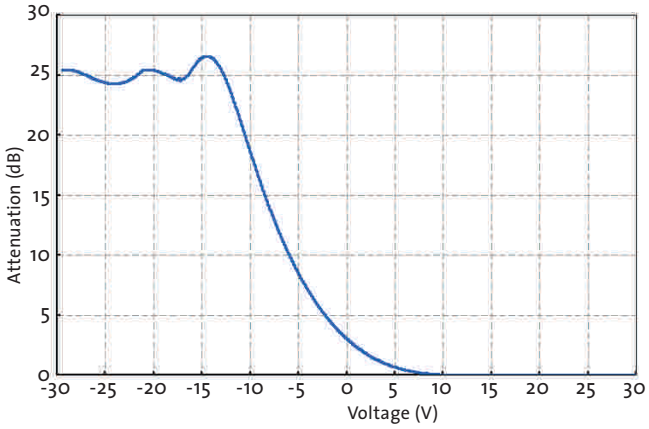
Electro Optical Response



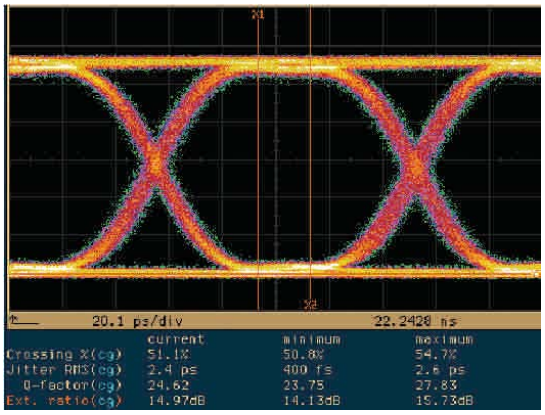
Electrical Return Loss



Attenuation Versus Applied Voltage



Eye Diagram



Absolute Maximum Ratings

Parameter	Conditions	Min	Max	Unit
Max Input Power (Electrical)			25	dBm
Max Input Power (Optical)	CW		100	mW
Max ΔV Bias Attenuator	Unbalanced		40	V
Max V Bias Electrode			30	V
Maximum Operating Temperature Variation Rate			1	°C/min
Storage Temperature		-40	+85	°C
Operating Temperature Range		0	+70	°C

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Specifications

Parameter		Unit
Optical		
Operating Wavelength Range	C+L band	
Insertion Loss	≤ 5.5	dB
Extinction Ratio (DC)	≥ 20	dB
Optical Return Loss	≥ 45	dB
Attenuation Range	≥ 10	dB
Electrical		
S_{21} Electro Optic Bandwidth (-3 dBe)	≥ 10	GHz
S_{11} Return Loss	≤ 10	dB
RF V_{π} Voltage (@ 1 kHz)	≤ 6.0	V
Bias V_{π} Voltage (@ 1 kHz)	≤ 6.0	V
Dynamic Extinction Ratio	≥ 13	dB
Chirp	± 0.2	
PRBS Electrical Drive Voltage	≤ 5.6	V
Input Connector Impedance	50	Ω

Where not specified, parameters are measured at 25 °C

Pinout and Fibers Specifications

RF Connector	K connector
Bias Connector	SMA
Attenuator Connector	Lead Pins
Input Fiber	Corning / Fujikura SM15P UV/UV250 (PANDA fiber)
Output Fiber	Corning SMF28 (1)

(1) Other output fibers available on request

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ORDERING INFORMATION

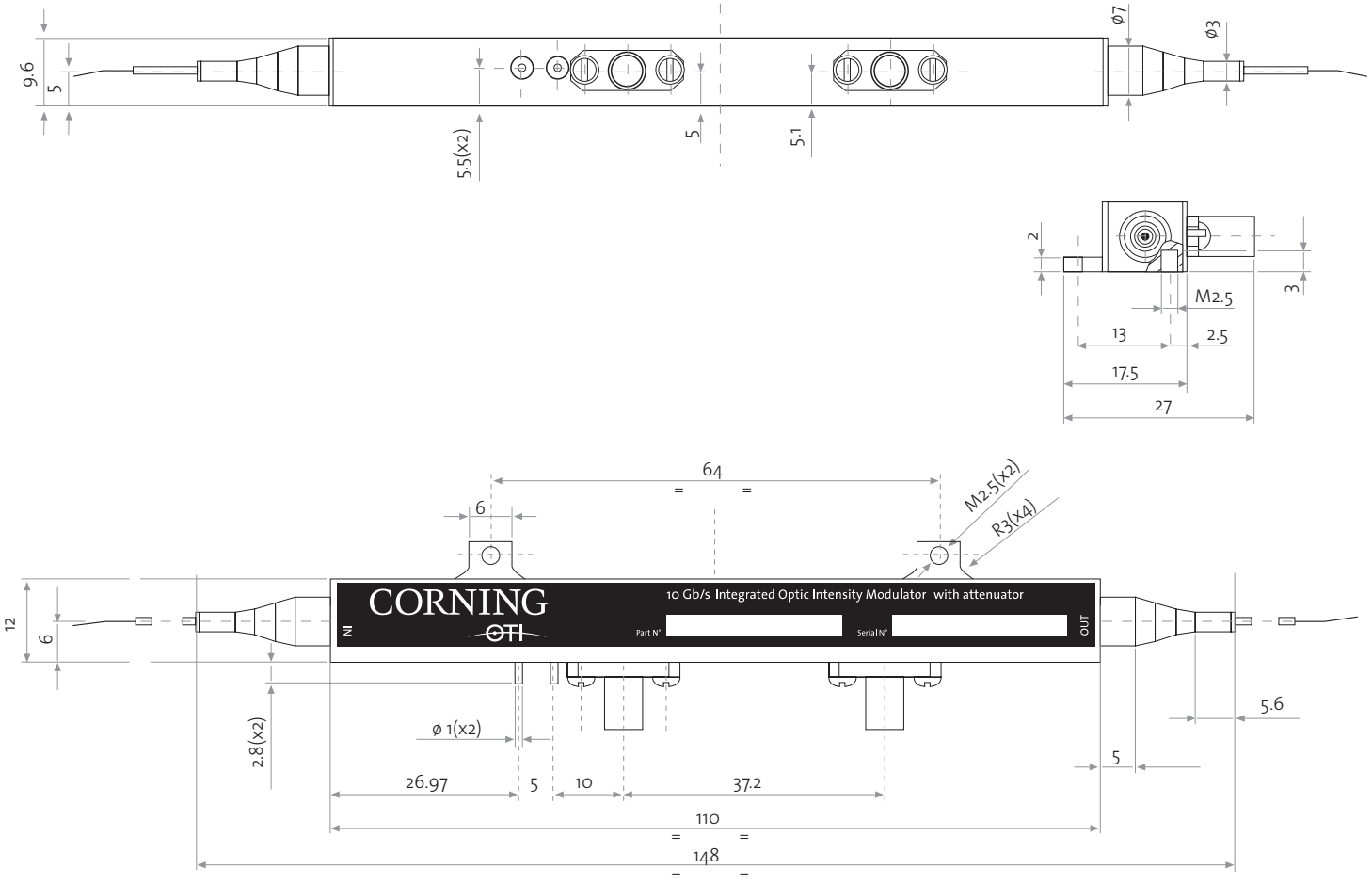
SD10-A-13S-Px-yyzz-00

x	**Output fiber** : **P**= polarization maintaining fiber **S**= standard single mode fiber
yy,zz	**Input and output connectors**: NC= no connectors FP= FC/SPC connectors

Other connectors available on request

Package Footprint

Dimensions are in mm



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ISO 9001 Certified

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Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

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Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

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