

## P R E L I M I N A R Y D A T A

IOAP-MOD

9203



## FEATURES

- Zero chirp design
- True hermetic, qualified to Telcordia™ GR-468-CORE
- Separate DC bias electrode
- Low drive voltage
- Suitable for RZ and NRZ modulation schemes
- High on/off extinction ratio
- Polarization maintaining fiber version available on output

## APPLICATIONS

- Ideal for OC768 C-band & L-band DWDM applications

## OC768 40 Gb/s amplitude modulator

**S**DL is developing a 40 Gb/s modulator to meet the requirements of OC768 systems. SDL's flagship 40 Gb/s Modulator employs X-cut titanium indiffused lithium niobate technology which allows system designers to

take advantage of this stable technology for their transmission systems.

All SDL modulators are supplied in a hermetic package, and are qualified to Telcordia GR-468-CORE, which ensures high reliability performance to the user.

## P R E L I M I N A R Y   D A T A

## Electro-Optical Performance

Parameter	Min	Value Typ	Max	Units
<b>Optical</b>				
Operating Wavelength	1520	-	1605	nm
Insertion Loss	3.0	4.0	5.0	dB
On/Off Extinction Ratio (DC)	20	30	-	dB
Optical Return Loss	-	-	-45	dB
<b>Electrical</b>				
Chirp	-0.1	0	0.1	
S11 Return Loss				
0.13 - 15 GHz	-15	-	-	dB
15 - 40 GHz	-10	-	-	dB
V <sub>pi</sub>				
@ 40 Gb/s NRZ	-	5.5	6.0	V
@ 40 GHz RZ	-	-	8.0	V
E/O Bandwidth	25	30	-	GHz

Parameter	Specification
<b>Fiber</b>	
Input	Fujikura SM-15-P-8/125-UV/UV-400
Output	Corning SMF-28 or Fujikura SM-15-P-8/125-UV/UV-400

**Packaging** (details available upon request)

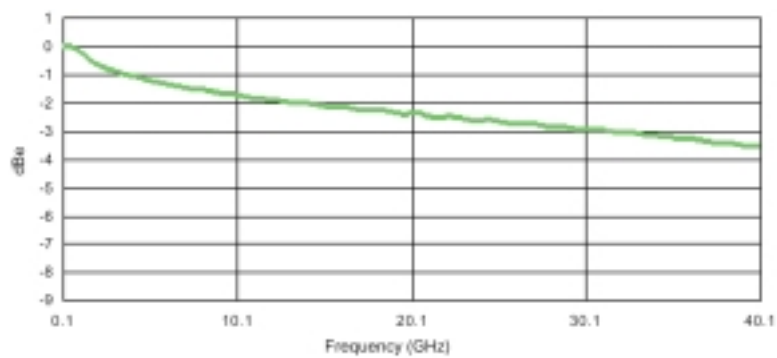
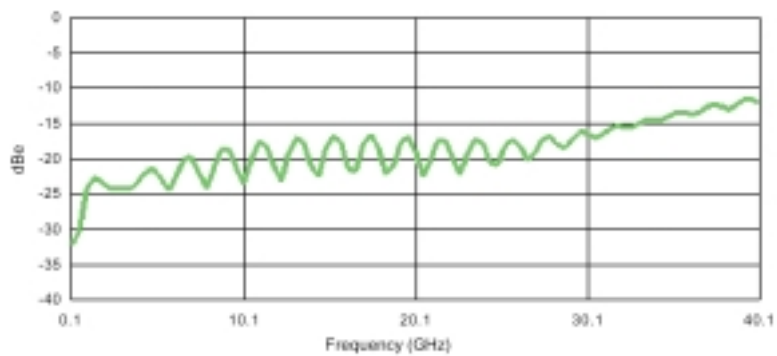
RF Connection	Anritsu K-Connector <sup>1</sup>
DC Ground Pins	DC feedthroughs

**Notes**

1. K is a trademark of the Anritsu Corporation

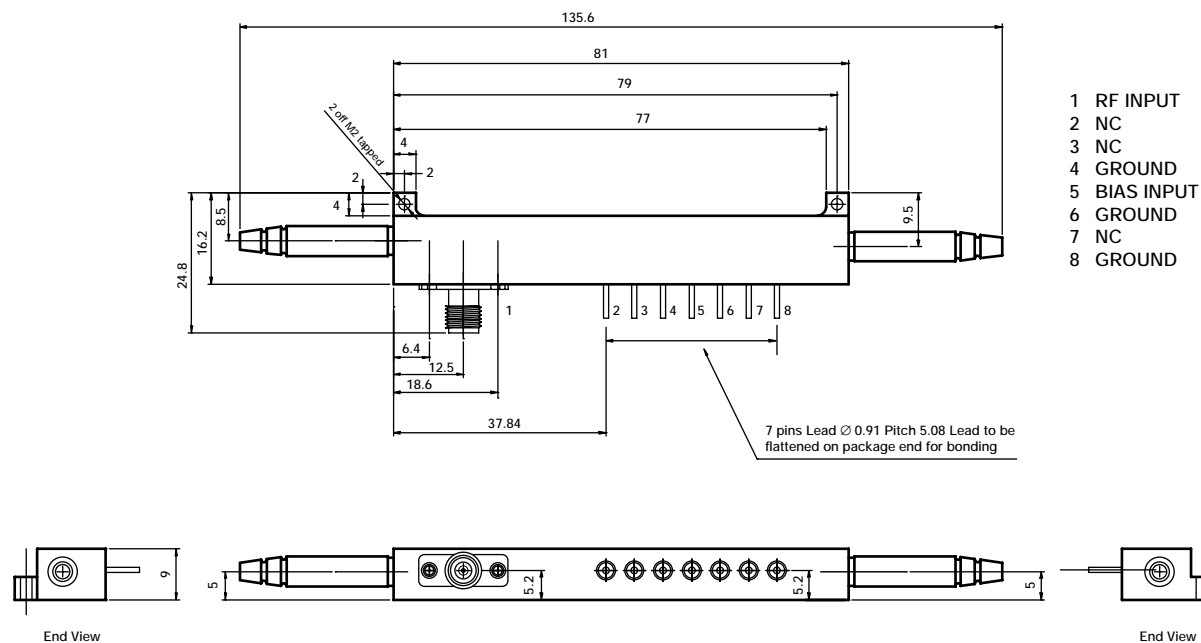
## P R E L I M I N A R Y   D A T A

## Small Signal Performance

Frequency Response  
(S21)Electrical Return Loss  
(S21)

## Outline Drawing

- Dimensions in millimeters except where indicated



SDL, Inc.  
80 Rose Orchard Way  
San Jose, CA 95134-1365  
Tel: 408-943-9411  
Fax: 408-943-1430  
E-mail: sales@sdli.com

SDL Integrated Optics Ltd.  
3-4 Waterside Business Park  
Eastways, Witham, Essex  
CM8 3YQ, United Kingdom  
Tel: +44 1376 502110  
Fax: +44 1376 502125  
E-mail: sdliosales@sdli.com

And for the latest information on all SDL products please visit our web site:

[www.sdli.com](http://www.sdli.com)

All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application. SDL reserves the right to change at any time without notice the design, specifications, function, fit or form of its products described herein, including withdraw at any time of a product herein as offered for sale. SDL makes no representations that the products herein are free from any intellectual property claims of others.