



# AVTECH ELECTROSYSTEMS LTD.

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SINCE 1975

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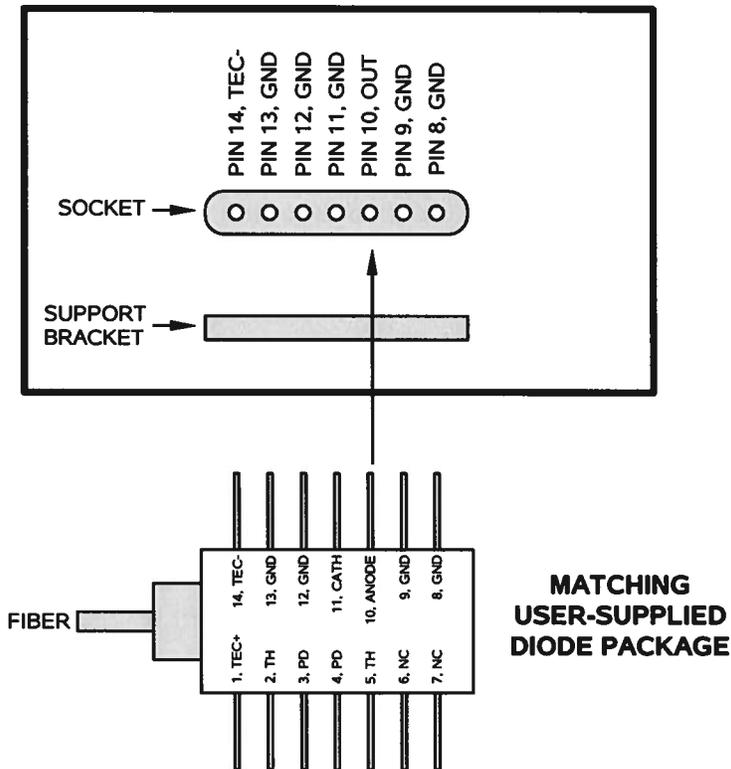
## INSTRUCTIONS

MODEL AVX-S1-P1-MEGC

PLUG-IN SOCKET OUTPUT MODULE

SERIAL NUMBER: 11175

### AVX-S1-P1-MEGC SOCKET VIEW



### WARRANTY

Avtech Electrosystems Ltd. warrants products of its manufacture to be free from defects in material and workmanship under conditions of normal use. If, within one year after delivery to the original owner, and after prepaid return by the original owner, this Avtech product is found to be defective, Avtech shall at its option repair or replace said defective item. This warranty does not apply to units which have been disassembled, modified or subjected to conditions exceeding the applicable specifications or ratings. This warranty is the extent of the obligation assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

### TECHNICAL SUPPORT

Phone: 613-226-5772 or 1-800-265-6681

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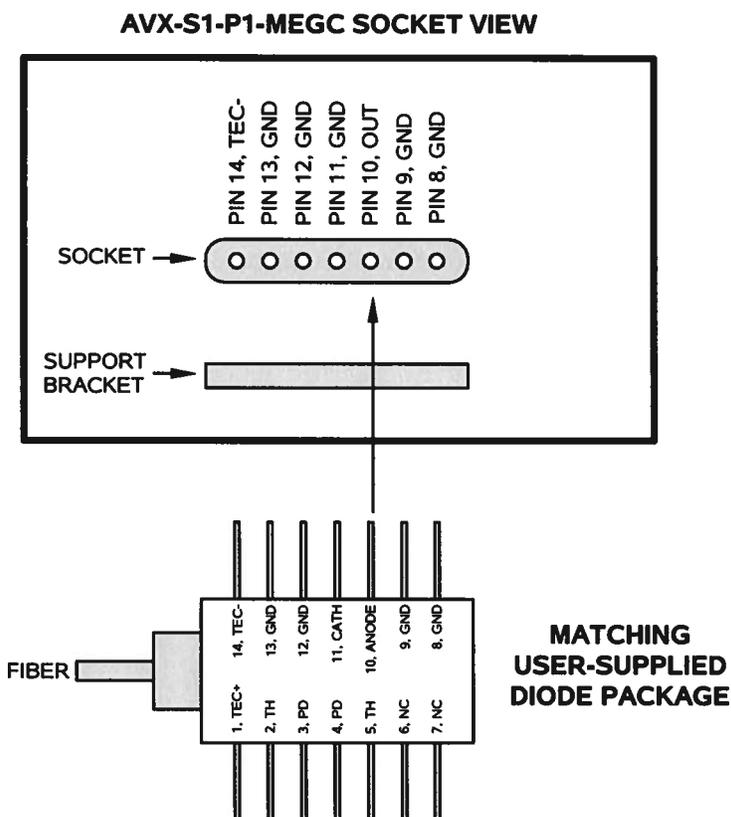
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Last modified April 5, 2005.  
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## INTRODUCTION

The AVX-S series of bias insertion units is designed to combine a pulse signal with a DC bias, and supply the resulting signal to a laser diode, which is inserted into a high quality socket included on the mount. The bias insertion module includes the necessary networks to match the laser diode to the pulse source, as well as networks for applying DC bias to the diode.

The AVX-S1-P1-MEGC is specifically designed to accommodate the Lumics "LU1064\_fbg\_close" butterfly-packaged laser diode with the pinout illustrated below:



ORIGINAL QUOTATION

Date: Fri, 25 Feb 2005 07:31:43 -0500  
 From: Avtech Sales  
 Subject: Re: AVO-9 series

XXXXX,

I am pleased to re-quote as follows (with accessible pin 14):

Quote number: 12481

Model number: AVX-S1-P1-MEGC

Description: Laser Diode Bias Insertion Unit with Socket, intended for use with the AVO-9A-C-P-TO3-MEGA mainframe (S/N 11094). The socket will accept pins 8-14 of the Lumics LU1064 fbg\_close butterfly-packaged laser diode described in the datasheet that you have supplied. A positive pulse will be applied to the diode anode (pin 10). Pins 8-9 and 11-13 will be grounded. Pin 14 will be made accessible through a solder terminal.

Other: as per the standard AVX-S1, described at  
<http://www.avtechpulse.com/laser-bias/avx-s1>

Price: \$XXXXXX US each, FOB destination. Valid only for delivery within the United States. This product is not subject to export controls.

Quote valid for: 60 days

Estimated delivery: 30 days after receipt of order.

Please call or email me if I can be of further assistance.

Thank you for your interest in our products!

Regards,  
 Dr. Michael J. Chudobiak  
 Chief Engineer

--- Avtech Electrosystems Ltd. ----- since 1975 ---

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Nanosecond Waveform Generators  
 for general purpose, R&D and OEM applications

Pulse Generators - Laser Diode Drivers - Pulse Amplifiers  
 Impulse Generators - Current Pulsers - Delay Generators - Splitters  
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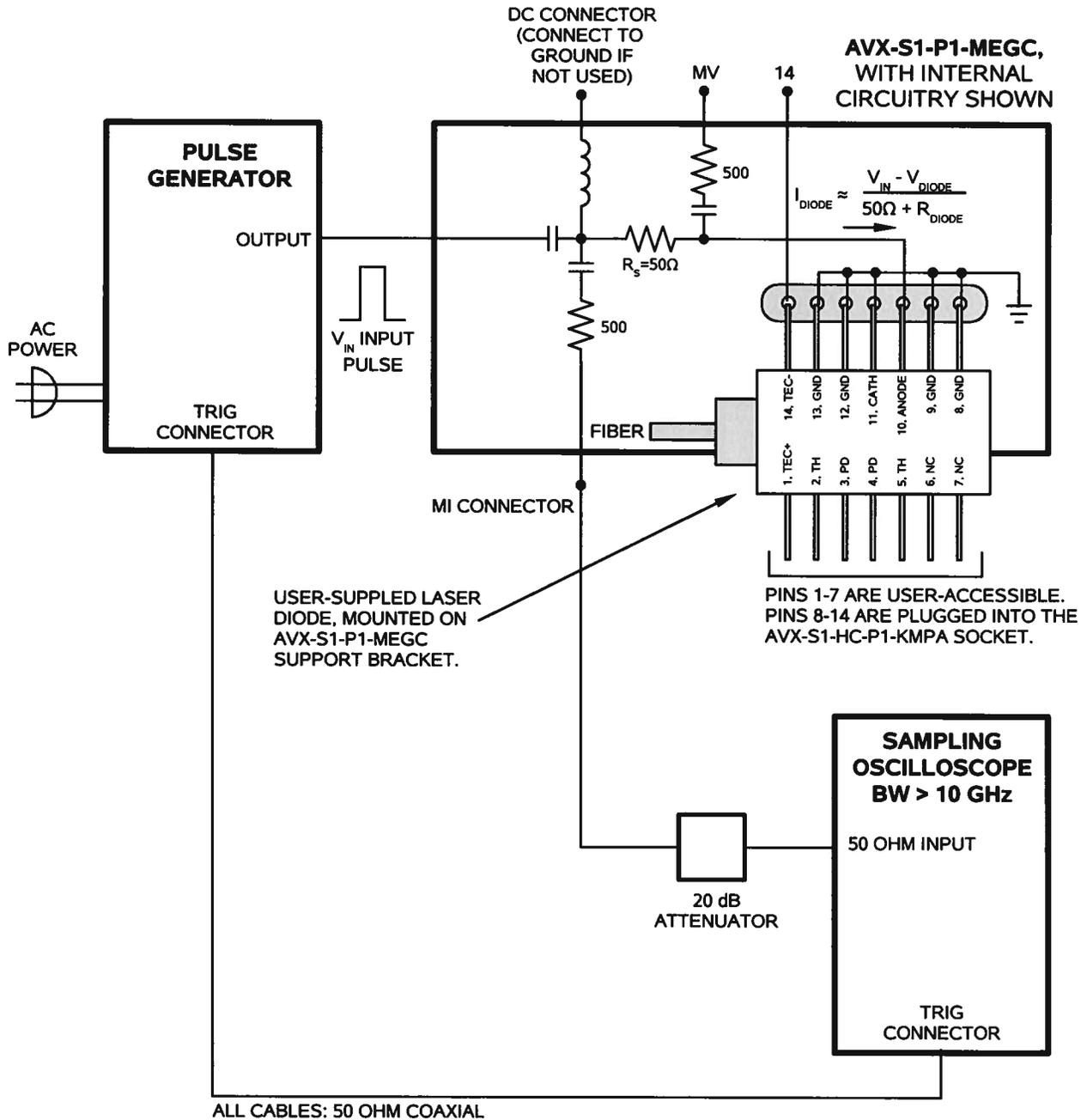
## SPECIFICATIONS

Model:	AVX-S1
Peak diode current:	400 mA
Max. input amplitude:	20 Volts
Pulse width (ns):	0.4 - 200
Rise time (ns):	0.2
Pulse PRF range:	DC-100 MHz
Max. bias current:	100 mA
Max. bias voltage:	50 Volts
Input impedance:	50 Ohms
R <sub>s</sub> :	50 Ohms
IN connector:	SMA
Monitor connector:	SMA
Bias connector:	Solder pin
Dimensions:	H x W x D: 41 mm x 66 mm x 76 mm (1.6" x 2.6" x 3.0")
Material:	Cast aluminum, blue enamel
Mounting:	Any

## GENERAL INFORMATION

### BASIC TEST ARRANGEMENT

To fully test the AVX-S1-P1-MEGC, and for normal operation, the output module should be connected as shown below:



The diode load is inserted into the socket on the output module, as shown above.

April 5/05