



CATV Band Modulator 1 GHz



FEATURES

- 1550nm wavelength band
(1300nm version available)
- Dual optical outputs YBBM design
(Single output also available)
- Integrated traveling wave phase modulator
- Flat response from 40 MHz to 860 Mhz
- Low RF drive voltage
- Low insertion loss
- Long-term stability
- Excellent bias stability
- **Custom mechanical and electrical designs available to match system requirements**
(Call factory for details)

APPLICATIONS

- CATV systems
- Fiber optic sensors

DESCRIPTION

Aeroflex TriLink's Lithium Niobate (LiNbO_3) external modulators has been specifically designed for use in cable television transmissions. These devices are ideal solutions for the CATV industry as they converge into high-speed internet access business as well as upgrade to digital broadcasts. These modulators will serve as key components in the CATV fiber backbone.

Aeroflex TriLink's superior designs, state-of-the-art manufacturing facilities and experience enable us to provide a high quality product in large quantities.

SPECIFICATIONS

Optical Characteristics

<i>Parameter</i>	<i>Min</i>	<i>Typical</i>	<i>Max</i>	<i>Unit</i>
Wavelength of Operation	1520	1550	1580	nm
Insertion Loss of Device	-	4.5	5.0	dB
Optical Power	-	-	200	mW
Optical Return Loss	55	60	-	dB
Optical Imbalance	-	0.5	1	dB

Microwave Characteristics

<i>Parameter</i>	<i>Min</i>	<i>Typical</i>	<i>Max</i>	<i>Unit</i>
Bandwidth	40	-	1000	MHz
V_{π} (RF port) *	-	2.5	3.5	V
V_{π} (DC bias port) *	-	5	6	V
Input Impedance of RF Port	50	50	50	Ω
Amplitude Flatness	-	0.5	1.0	dB
Phase Flatness	-	-	5	degrees
S11	-	-19	-16	dB
CSO Complementary	-	-17	-68	dB
Microwave Input	-	-	24	dBm

Phase Modulator

<i>Parameter</i>	<i>Min</i>	<i>Typical</i>	<i>Max</i>	<i>Unit</i>
Half-wave voltage DC	-	-	8.5	V
Operating Bandwidth	-	-	4.0	GHz
S11	-	-19	-16	dB
Input Impedance	50	50	50	Ω

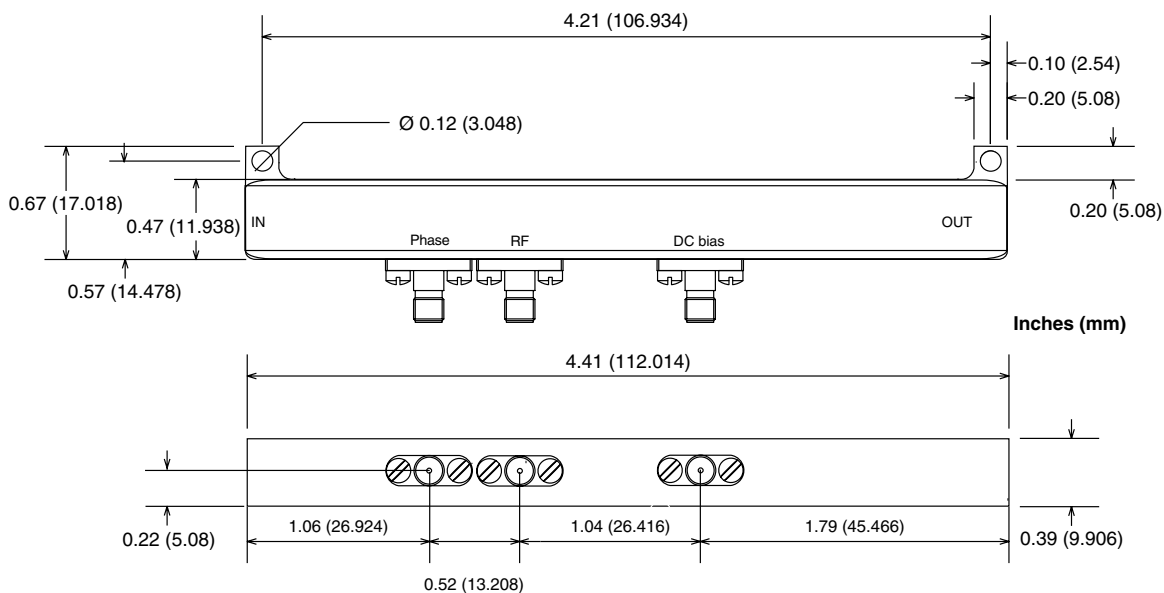
Physical Characteristics

Input Fiber/Connector	Fujikura PANDA Fiber/FC-PC
Optical Fiber/Connector	Corning SM Fiber/FC-PC
Electrical Connector	SMA
Operating Temperature	0°C to 70°C
Storage Temperature	-40°C to +90°C

* Data is measured at DC, unloaded

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PACKAGE OUTLINE



Aeroflex Trilink reserves the right to change at any time without notice the specifications, design, function, or form of its products described herein. All parameters must be validated for each customer's application by engineering. No liability is assumed as a result of use of this product. No patent licenses are implied.



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