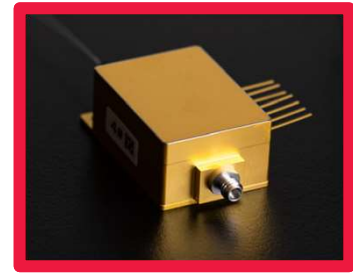


O-BAND TFLN 110 GHz PACKAGED INTENSITY MODULATOR

TFLN-G2-1310-W

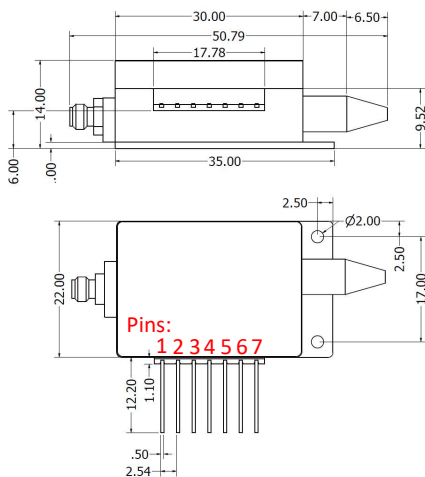
KEY FEATURES

- Convenient W-connector package with PM optical fiber
- <4.5 dB EO roll-off at 110 GHz typical
- Low half-wave voltage
- Compact form factor
- Differential thermo-optic heaters for stable bias control
- **Low V_{π} (<2 V) and low insertion loss (<5 dB) models available on request**



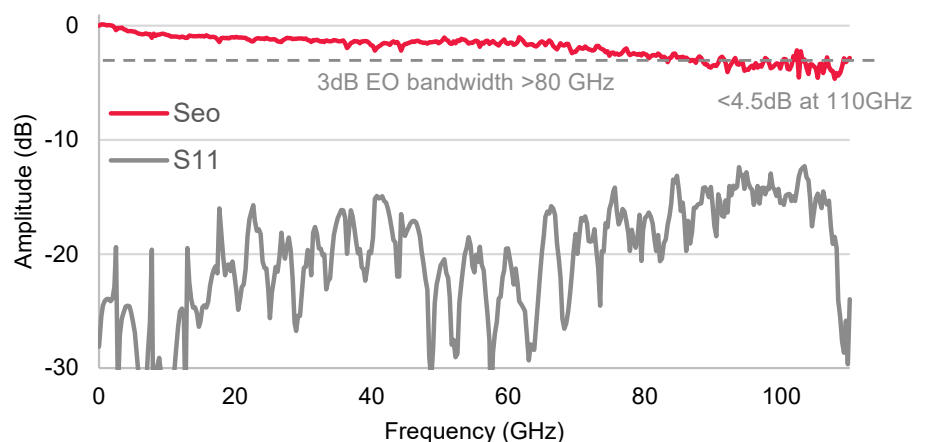
Absolute Maximum Ratings	
Optical Input Power	100 mW
RF Input Power	23 dBm
Thermo-optic Bias Heater Power	200 mW

Specifications	Min	Typical	Max	Units
Operating Wavelength		1310		nm
1-dB Optical Bandwidth	60	90		nm
Optical Insertion Loss (F2F)		7	9	dB
Optical Return Loss	25	35		dB
Optical Extinction Ratio (@DC)	15	20		dB
Fiber Length		1		m
Fiber type		PM13-U25D-H		
RF V_{π} (@1 MHz)		2.5	2.8	V
RF V_{π} (@2 GHz)		2.8	3.2	V
3dB E/O Bandwidth (Ref 2 GHz)	65	80		GHz
6dB E/O Bandwidth (Ref 2 GHz)	110	>125		GHz
Thermo-optic Bias Heater P_{π}		33	42	mW
Thermo-optic bias heater resistance	900	1000	1100	Ohm
RF S11 (DC to 110GHz)		-15	-7	dB
RF Input Connector		W-connector		
Nominal RF Impedance		50		Ohm
Bias Pin Connections		Heater 1: Pins 5,6 Heater 2: Pins 3,4		
Optical Fiber Connections		Modulator: 3→2 Reference loop: 1,4		



Units in mm

Typical E/O response and RF return loss



Last Rev: 2023/03/02