

MTS40-A2-532.700-M002

PRODUCT OVERVIEW

Based on TeO2, these modulators/shifters use the slow shear mode interaction and hence one can benefit from its large active aperture, large separation angle, high diffraction efficiency as well as the low RF power consumption. Common applications include bio-photonics, interferometry and many others

FEATURES

- Large Active aperture & separation angle
- Linear polarization
- High diffraction efficiency.
- Low RF power consumption.



SPECIFICATIONS (T=25°C)

PARAMETER	RATING	UNIT
Material-Acoustic mode-Velocity	TeO2[S] - 650	m/s
Optical Wavelength range (AR coated) (λ)	532-700	nm
Carrier Frequency / Frequency shift (F)	+/-40	MHz
Transmission	≥95, nom 98	%
Input / Output Polarization	Linear /Polarisation flip≈90°	
Active Aperture	2x2	mm²
Rise/fall time (Tr)	1	μs/mm
Separation Angle (0-1) (Δθ)	>32.7	mrd
Static Extinction Ratio	>33	dB
*Diffraction Efficiency (η)	> 85, nom 90	%
Max optical power density	2.5 @ 532 5@633	W/mm ⁴
Input impedance	50	Ω
V.S.W.R.	< 1.2:1	
RF Power (P)	< 0.5	W
Connector	SMA female	
Size	50.9 x 22.4 x 17.3	mm ³
Weight	Nom 50	g
Packaging	IN PRO 050	
Operating Temperature (non condensing)	+10 to +40	°C
Storage Temperature (non condensing)	-40 to +65	°C
RoHS Compliance	Yes	

*Diffraction efficiency is beam diameter and wavelength dependent

$$T_r = 0.66 \frac{\phi}{V}$$

*
$$F_{-3dB} = \frac{0.48}{T_{12}}$$

$$\Delta \theta = \frac{\lambda F}{V} \quad * \quad \frac{P_1}{P_2} = \frac{\lambda_1}{\lambda_2}$$

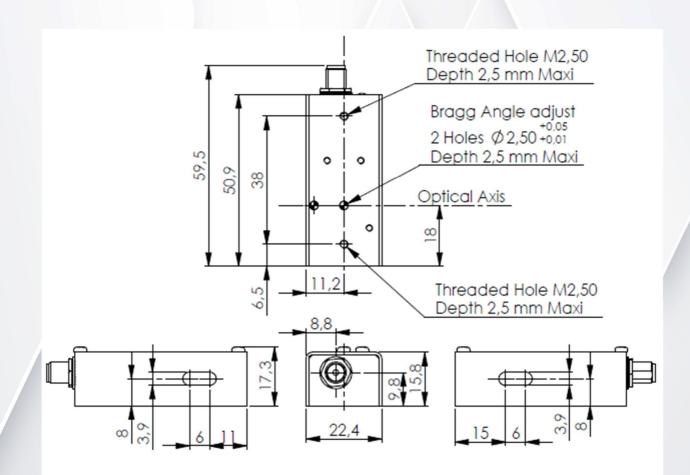
AA OPTO-ELECTRONIC 18, rue Nicolas Appert 91898 ORSAY FRANCE Tel: +33 (0)1 76 91 50 12 Fax: +33 (0)1 76 91 50 31 www.aaoptoelectronic.com AA Sa reserves the right to make changes to the products or information herein without notice. No liability is assumed as a result of their use or application.

AO MODULATOR/SHIFTER



MTS40-A2-532.700-M002

OUTLINE DRAWING, mm



AA OPTO-ELECTRONIC 18, rue Nicolas Appert 91898 ORSAY FRANCE Tel: +33 (0)1 76 91 50 12 Fax: +33 (0)1 76 91 50 31 www.aaoptoelectronic.com AA Sa reserves the right to make changes to the products or information herein without notice. No liability is assumed as a result of their use or application.