

DT230-B120A0.5-xx

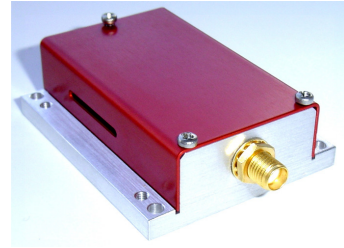
AO DEFLECTORS 1-axis/ Shifter



Product Overview

These deflectors use the TeO₂ crystal in longitudinal mode and hence offer a high speed performance. They can also be used as fixed frequency shifters @ 230 MHz as well as variable frequency shifters in the frequency range of 230 +/- 60 MHz. They are available in the wavelength range of either 400-450 nm or 450-670 nm.

A common application is in the printing industry.



Features

- High speed
- Linear or random polarization

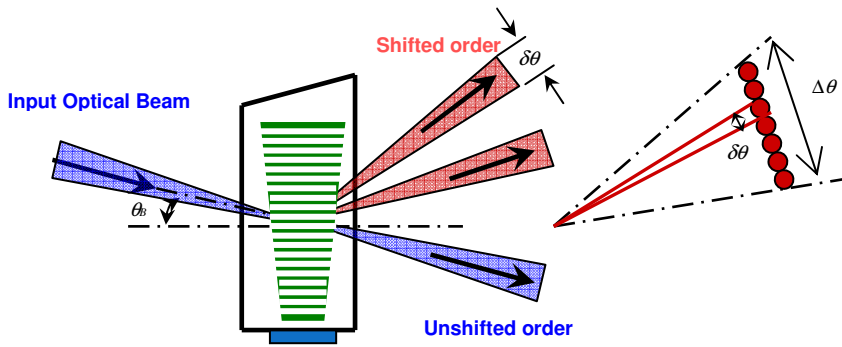
Access to your operating manual



TECHNICAL DATA SHEET 2014

Technical Specifications

Parameter	LVIS	VIS
Material-Acoustic mode-Velocity	TeO ₂ - [L] - 4200 m/s	
Optical Wavelength range (AR coated)	400-450 nm	450-670 nm
Optical Transmission	> 95 %	
Input / Output Polarization	Linear	
Active Aperture	1x 17.5 mm ²	0.5 x17.5 mm ²
Carrier Frequency / Frequency shift	230 +/- 60 MHz	
Frequency range	120 MHz	
Scan angle	15.2 mrd @532 nm	
Static Extinction Ratio	> 33 dB	
Acces Time	4.2 μs with 17.5 mm beam diameter	
Resolution (N)	500 @ with 17.5 mm beam diameter	
Diffraction Efficiency (TEM ₀₀ beam, M ² ≤ 1.1)	> 50 %	
Max optical power density	0.5 W/mm ²	5 W/mm ²
Input impedance	Nom 50 Ω	
V.S.W.R.	Nom < 2:1	
RF Power / Connector	≤ 2 W / SMA	
Size / Weight	(Lxlxh) 57 x 47 x 17.7 mm ³ / 60 g	Inpro
Operating Temperature (non condensing)	+10 to +40 Non condensing	
Storage Temperature	-20 to +50 Non condensing	



$$N = T_a \times \Delta f$$

$$N = \frac{\Delta \theta}{\delta \theta}$$

$$T_a = \frac{\phi}{V}$$

Δf : RF frequency range
 λ : Wavelength of laser beam
 $\Delta \theta$: Scan Angle
 V : Acoustic velocity
 N : number of resolvable points

Relative efficiency versus scan angle

