

Acousto-Optic Multi-Channel Modulators

Acousto-optic multi-channel modulators (AOMM) integrate the transducer array with a single acousto-optic crystal to modulate or deflect multiple beams separately.

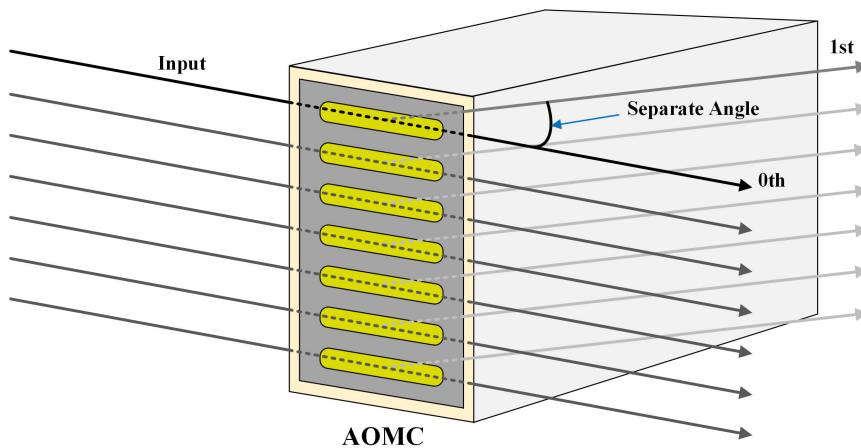
CASTECH manages to minimize the crosstalk through advanced optical and circuitry design, allowing the product to modulate up to 10 channels simultaneously.

By using high internal quality, low scattering crystalline quartz, CASTECH's multi-channel acousto-optic modulators are featured with low insertion and high LIDT to promise good performance.



Applications

- Lithography
- Laser marking
- Material processing
- Micromachining



Schematic diagram of multichannel acousto-optic diffraction

Acousto-Optic Multi-Channel Modulators

Multi-Channel AOM Model Number: CAOMM-f-a-n-mt-w-c-h

RF (f)	Aperture (a)	Number of Channels (n)	Material (m)	Mode (t)	Wavelength(w)	Rf Connector (c)	Housing (h)
100 MHz 120 MHz 220 MHz ...	002 (0.2 mm) 003 (0.3 mm) ...	5 8 10	FS (Fused Silica) CQ (Crystalline Quartz) TE (TeO ₂)	C (Compressional)	355 nm 370 nm ...	AF (SMA-F) AM (SMA-M) CF (SMC-F) CM (SMC-M) ...	B23 B33 B35 B36 ...

Typical Specifications

Operating Frequency	Active Aperture	Wavelength	Number of Channels	Channel Crosstalk	Diffraction Efficiency	VSWR
100 MHz	0.2~1 mm	370 nm	5	> 20 dB	≥ 70%	< 2.1:1
200 MHz	0.2~1 mm	355 nm	10	> 20 dB	≥ 70%	< 2.1:1

Housing dimensions(mm):

