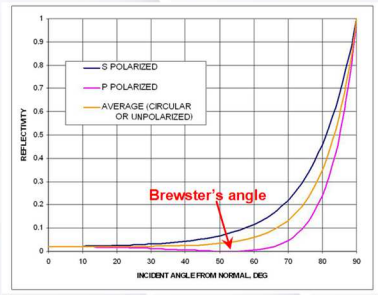
MQ200-Ax-xx-Br – MQ200-BxAx-xx-Br

Product Overview

These modulators have been specially designed for deep UV applications. They are made of fused Silica UV grade with Brewster incidence and can operate in the range of 244 to 266 nm or 266 to 300 nm. Applications can be amplitude modulation, pulse picking or fixed/variable frequency shifting.



FEATURES

- High laser power
- Linear polarization
- High diffraction efficiency
- Brewster incidence for high transmission

SPECIFICATIONS (T=25°C)

PARAMETER	RATING	UNIT
Material-Acoustic mode-Velocity	Fused Silica-L - 5960	m/s
Carrier Frequency / Frequency shift	+/-200	MHz
Transmission	Brewster incidence angle (Horizontal plane)	
Input / Output Polarization	Linear parallel / Linear parallel	
Bragg incidence angle	Vertical plane	
Rise/fall time (T_r)	110	ns/mm
Static Extinction Ratio	>30	dB
Input impedance	50	Ω
V.S.W.R.	< 1.2:1	
Connector	SMA female	
Size	59.1 x 33.6 x 42.4	mm^3
Weight	Nom 100	g
Packaging	IN PRO 082	
Operating Temperature (non condensing)	+10 to +40	°C
Storage Temperature (non condensing)	-40 to +65	°C
RoHS Compliance	Yes	

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MQ200-Ax-xx-Br – MQ200-BxAx-xx-Br

Versions

	MQ200-A1.5-244.266-Br	MQ200-A1.5-266.300-Br
Aperture	1.5 x 2 mm²	
Wavelength	244-266nm	266-300nm
*Min Rise/fall time	60 ns	
Separation angle (0-1)	>8.2 mrd	>8.9 mrd
Diffraction efficiency	>85 %	
Maximum RF power	4 W	
Maximum Laser power density	5 W/mm²	
Option Variable frequency	200+/-15 MHz M200-B30A1.5-244.266-Br Efficiency typ >75 %	200+/-15 MHz MQ200-B30A1.5-266.300-Br Efficiency typ >75 %

min rise/fall time to reach optimal diffraction efficiency.

	MQ200-A1-244.266-Br	MQ200-A1-266.300-Br
Aperture	1 x 2 mm²	
Wavelength	244-266nm	266-300nm
*Min Rise/fall time	30 ns	
Separation angle (0-1)	>8.2 mrd	>8.9 mrd
Diffraction efficiency	>85 %	
Maximum RF power	4 W	
Maximum Laser power density	5 W/mm²	
Option Variable frequency	200+/-15 MHz M200-B30A1-244.266-Br Efficiency typ >75 %	200+/-15 MHz MQ200-B30A1-266.300-Br Efficiency typ >75 %

min rise/fall time to reach optimal diffraction efficiency.

$T_r = 0.66\frac{\phi}{V}$ * $F_{-3dB} = \frac{0.48}{T_r}$ * $\Delta\theta = \frac{\lambda F}{V}$ * $\frac{P_1}{P_2} = \frac{\lambda_1}{\lambda_2}$

OUTLINE DRAWING IN PRO 082, mm (UV)