

MQ110-A3-UV

FEATURES

- UV High laser power
- Linear polarization
- Large aperture
- High diffraction efficiency



SPECIFICATIONS (T=25°C)

PARAMETER	RATING	UNIT
Material-Acoustic mode-Velocity	Fused Silica-L - 5960	m/s
Optical Wavelength range (AR coated) (λ)	325-425	nm
Carrier Frequency / Frequency shift	+/-110	MHz
Transmission	≥ 95 , nom 98	%
Input / Output Polarization	Linear Vertical	
Active Aperture	3 x 3	mm ²
Recommended beam diameter	0.5-2.5	mm
Rise/fall time (T_r)	110	ns/mm
Separation Angle (0-1) ($\Delta\theta$)	6.6 @355nm	mrd
Static Extinction Ratio	>33	dB
*Diffraction Efficiency (η)	≥ 85 @ 355 nm, ≥ 75 @ 405 nm	%
Max optical power density	10	W/mm ²
Input impedance	50	Ω
V.S.W.R.	< 1.2:1	
RF Power (P)	<4	W
Connector	SMA female	
Size	47 x 60 x 53	mm ³
Weight	Nom 100	g
Packaging	IN PRO 376	
Operating Temperature (non condensing)	+10 to +40	°C
Storage Temperature (non condensing)	-20 to +50	°C
RoHS Compliance	Yes	
OPTION MQ110-B30A3-UV	Frequency range 110 +/-15MHz, scan angle 1.8mrd @355nm, Efficiency $\geq 70\%$	

*Diffraction efficiency is beam diameter and wavelength dependant.

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

OUTLINE DRAWING, mm

