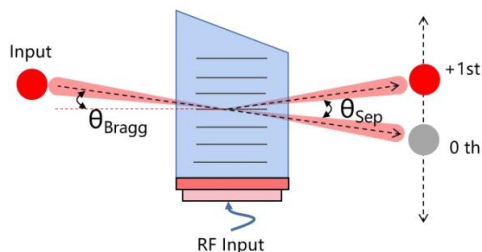


AOM Specifications 声光调制器产品规格书 M0039-QL080-040-1030



1. SPECIFICATIONS (规格)

Interaction material (介质材料)	Crystal quartz (石英)
Acoustic mode (声波模式)	Longitudinal (纵波)
Operating wavelength (工作波长)	1030nm
Polarization (光偏振)	Linear, vertical to base (线偏振, 垂直于基座)
Transmission (透过率)	>99.6%
Active aperture (有效孔径)	4.0mm
Center frequency (Fc) (中心频率)	80MHz
Diffraction efficiency (衍射效率)	>85%
RF power (射频功率)	100W (max)
Input Impedance (输入阻抗)	50Ω Nominal
VSWR (驻波比) @Fc	< 1.2:1
RF connector (射频接头)	BNC-F
Water flow rate (水流量)	>1.4L/minute
Cooling (散热方式)	Conduction-cooled (传导冷却)
Shell material (外壳材料)	Aluminum alloy (铝合金)
Storage temperature (存储温度)	-20~70°C

2. PERFORMANCE vs. WAVELENGTH (性能 vs. 波长)

Wavelength (光波长) -nm	1030
Bragg angle (布拉格角) -mrad	7.2
Separation angle (分离角) -mrad	14.4

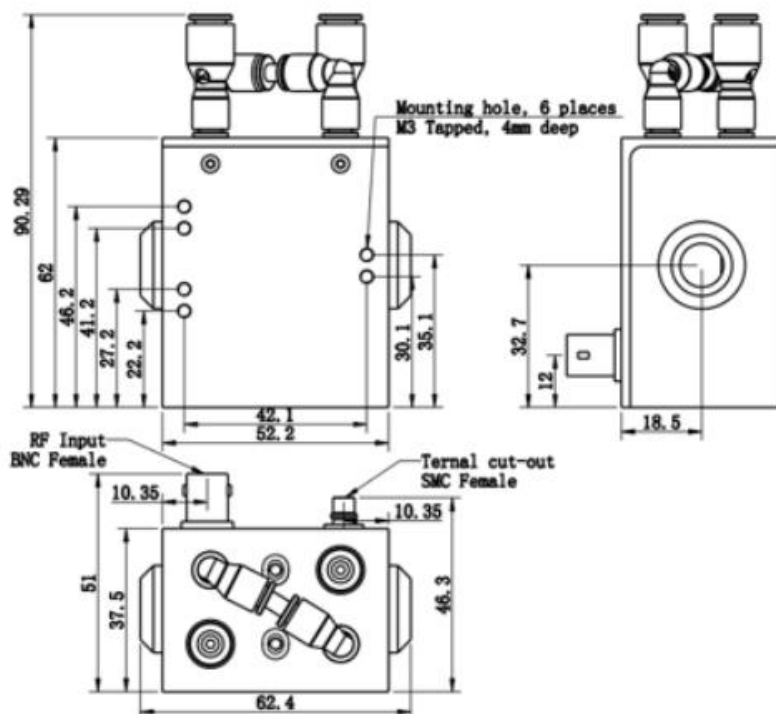
3. ESTIMATED PERFORMANCE vs. BEAM DIAMETER (预估性能 vs. 光束直径)

Beam diameter (光束直径) -mm	1	2	3
Rise time (上升沿时间) -ns	113	226	339
Diffraction efficiency (衍射效率) @Fc	85%	85%	85%

4. ORDERING CODES (编码规则)

	Materials	Acoustic type	Fc	Active aperture	Wavelength	
M0001	— X	X	XXX	— XXX	— XXXX	
	QZ	Longitudinal	L	027	040 4 mm	1030 1030 nm
	TeO ₂	Shear	S	041	060 6 mm	1064 1064 nm
	Ge			080	080 8 mm	9600 9600 nm

5. DIMENSIONS (外形尺寸-mm)



6. SUGGESTED RF DRIVER ELECTRONICS (建议驱动型号)

RD1044-180-24-100-WA

7. REVISION (版本)

Number (版本号)	Revisions date (修订日期)	Revision (修改项目)	Revision description (修订内容说明)
A	2024. 1. 11	New	/

Quality Assured: In house made, high damage threshold, Vacuum bonding, 100% Diffraction efficiency test & burn-in test.