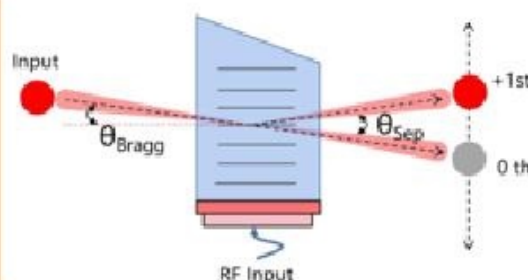


AOQS Specifications 声光Q开关产品规格书 Q0051-FS041-050-1064



1. SPECIFICATIONS (规格)

Interaction material (介质材料)	Fused Silica (熔融石英)
Acoustic mode (声波模式)	Shear (切变波)
Operating wavelength (工作波长)	1064 nm
Polarization (光偏振)	Random polarization (随机偏振)
Damage threshold (损伤阈值)	> 1GW/cm ²
Transmission (透过率)	> 99.6%
Active aperture (有效孔径)	5 mm
Center frequency (中心频率)	40.68 MHz
Loss modulation (损耗调制)	> 86%
RF power (射频功率)	50 W (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)	Water-cooling (水冷散热)
Shell material (外壳材料)	Aluminum alloy (铝合金)
Water cooling channel material (水冷块材料)	Stainless steel (不锈钢)

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

Wavelength (光波长) -nm	1064
Bragg angle (布拉格角) -mrad	3.6
Separation angle (分离角) -mrad	7.3

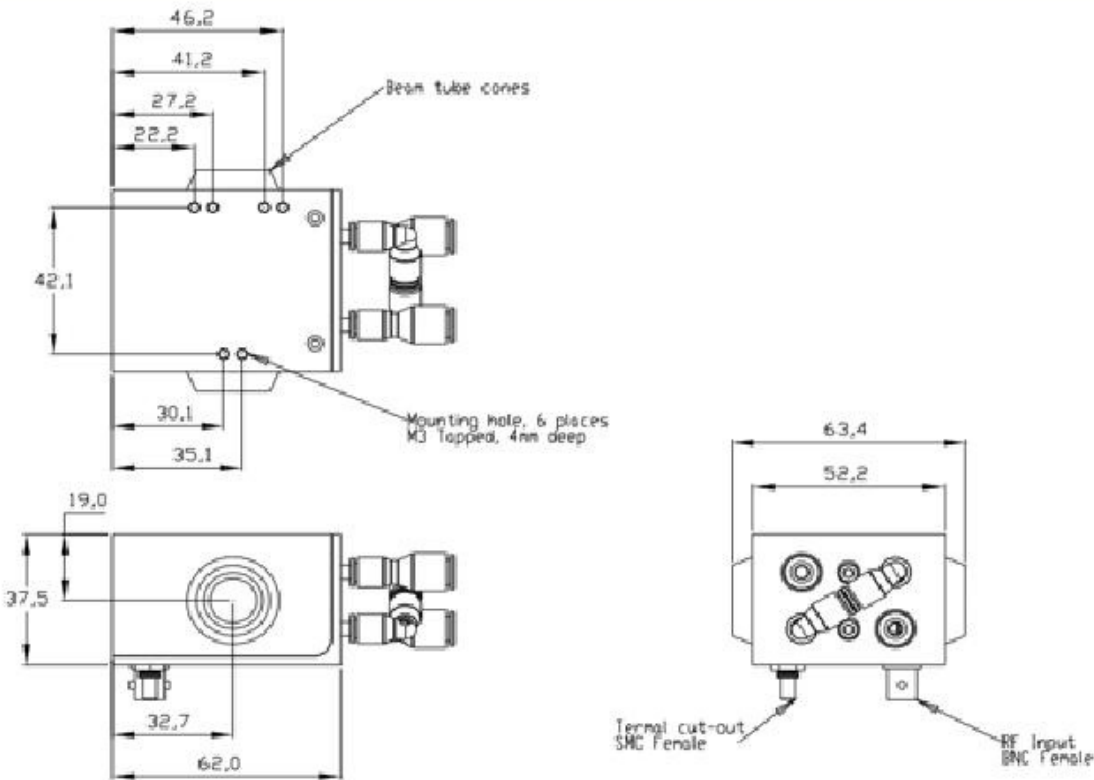
3. ESTIMATED PERFORMANCE vs. BEAM DIAMETER (预估性能 vs. 光束直径)

Beam diameter (光束直径) -mm	1	3	5
Rise time (上升沿时间) -ns	109	327	654
Diffraction Loss modulation (损耗调制)	86%	86%	86%

4. ORDERING CODES (编码规则)

	Materials		Acoustic type		Fc	Active aperture		Wavelength	
Q0001	—	X	X	X	XXX	—	XXX	—	XXXX
	QZ	Q	Longitudinal	L	27.12 MHz	027	040	4 mm	1030 1030 nm
	TeO ₂	T	Shear	S	40.68 MHz	041	060	6 mm	1064 1064 nm
	Ge	G			80 MHz	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)

RD1018-041-24-050-SZ

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	2024.8.28	NEW	/

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