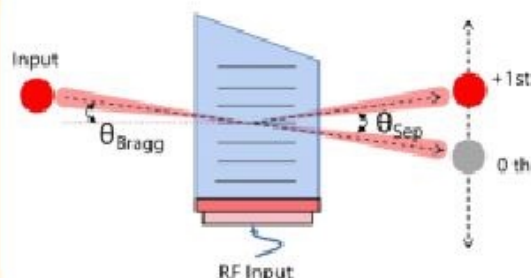


AOQS Specifications 声光Q开关产品规格书 Q0065-FL027-030-1064



1. SPECIFICATIONS (规格)

Interaction material (介质材料)	Fused Silica (熔融石英)
Acoustic mode (声波模式)	Longitudinal (纵波)
Operating wavelength (工作波长)	1064 nm
Polarization (光偏振)	Linear, vertical to base (线偏振, 垂直于基座)
Damage threshold (损伤阈值)	$> 1 \text{ GW/cm}^2$
Transmission (透过率)	$> 99.6\%$
Active aperture (有效孔径)	3 mm
Center frequency (中心频率)	27.12 MHz
Static insertion loss (静态插入损耗)	$\leq 6\%$
RF power (射频功率)	50 W (max)
Input impedance (输入阻抗)	50 Ω Nominal
VSWR (驻波比) @Fc	$< 1.2:1$
RF connector (射频接头)	BNC-F
Water flow rate (水流量)	$> 1.4 \text{ L/minute}$
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	2.4
Separation angle (分离角) -mrad	4.8

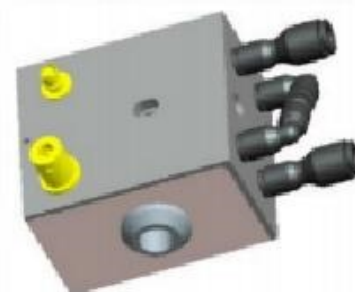
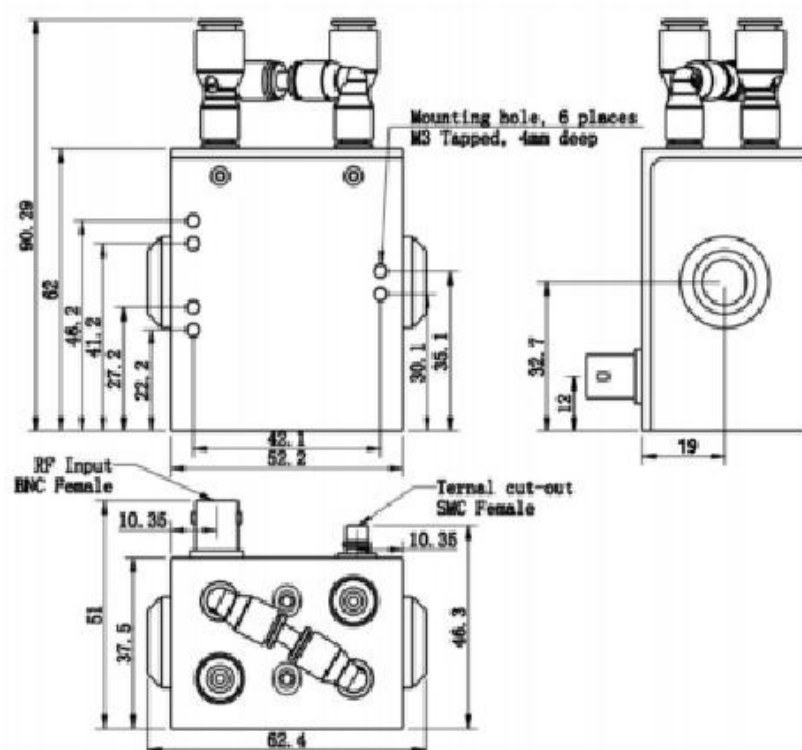
3. ESTIMATED PERFORMANCE vs. BEAM DIAMETER (预估性能 vs. 光束直径)

Beam diameter (光束直径) -mm	1	1.5	3
Risetime (上升沿时间) -ns	109	327	436
Static insertion loss@Fc	6%	6%	6%

4. ORDERING CODES (编码规则)

	Materials		Acoustic type		Fc	Active aperture		Wavelength	
Q0001	—	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)

RD1006-027-24-050-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	2024.8.19	NEW	/

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