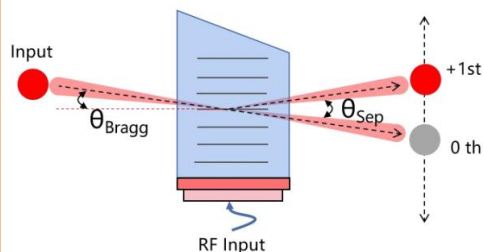


AOM Specifications 声光调制器产品规格书 M0017-TL250-003-780-950



1. SPECIFICATIONS (规格)

Interaction material (介质材料)	Tellurium dioxide (二氧化碲)
Acoustic mode (声波模式)	Longitudinal (纵波)
Operating wavelength (工作波长)	780-950 nm
Polarization (光偏振)	Linear, vertical to base (线偏振, 垂直基座)
Transmission (透过率)	> 97 %
Active aperture (有效孔径)	2.5 mm × 0.32 mm
Center frequency (Fc) (中心频率)	250 MHz
Diffraction efficiency (衍射效率)	> 70 % @ 150 μm beam diameter
RF power (射频功率)	1.6 W (max) @ 780 nm
	1.9 W (max) @ 850 nm
	2.4 W (max) @ 950 nm
Input Impedance (输入阻抗)	50 Ω Nominal
VSWR (驻波比) @Fc	< 1.3:1
RF connector (射频接头)	SMB
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 $^{\circ}\text{C}$

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

Wavelength (光波长) -nm	800
Bragg angle (布拉格角) -mrad	23.8
Separation angle (分离角) -mrad	47.6

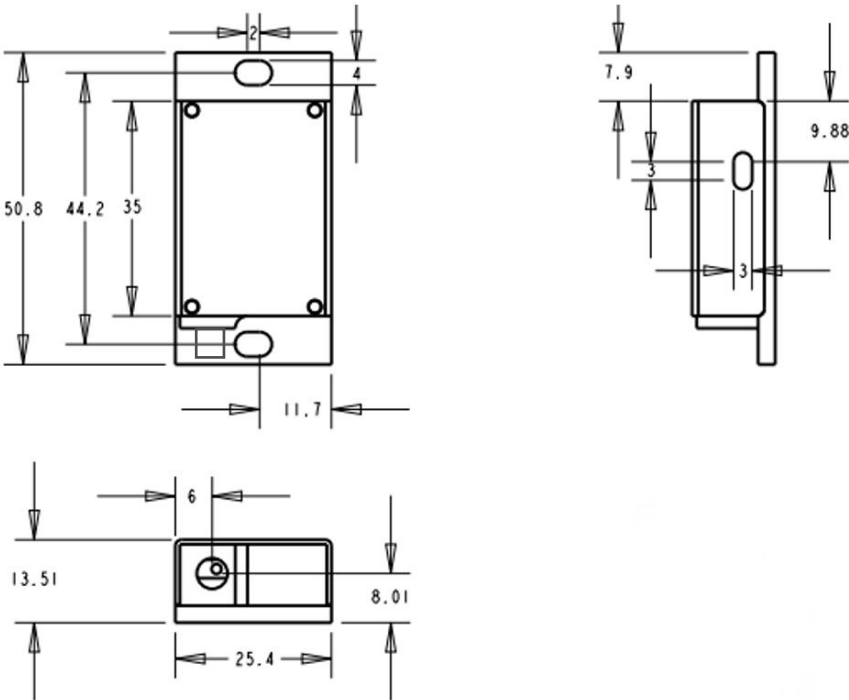
3. ESTIMATED PERFORMANCE vs. BEAM DIAMETER (预估性能 vs. 光束直径)

Beam diameter (光束直径) -mm	150 μm
Rise time (上升沿时间) -ns	23.25 ns
Diffraction efficiency (衍射效率) @Fc	70 %

4. ORDERING CODES (编码规则)

	Materials		Acoustic type		Fc	Active aperture		Wavelength	
M0001	—	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)

RD1025-250-24-003-CA

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	2022. 10. 19	New	/

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