

AQOS Specifications
声光Q开关产品规格书
Q0042-QL080-015-1064



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)	1064 nm
Polarization (光偏振)	Linear, perpendicular to base (线偏振, 垂直于基座)
Transmission (透过率)	> 99.6%
Active aperture (有效孔径)	1.5 mm
Center frequency (中心频率)	80 MHz
Loss modulation (损耗调制)	>85%
RF power (射频功率)	25 W (max)
Input impedance (输入阻抗)	50Ω Nominal
VSWR (驻波比) @Fc	< 1.2:1
RF connector (射频接头)	SMA-F
Cooling (散热方式)	Conduction-cooled (传导冷却)
Shell material (外壳材料)	Aluminum alloy (铝合金)

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

Wavelength (光波长) -nm	1064
Bragg angle (布拉格角) -mrad	7.4
Separation angle (分离角) -mrad	14.8

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
Rise time (上升沿时间) -ns	113	170
Loss modulation (损耗调制)	85%	85%

	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

Technical drawing of the M3-6H connector showing isometric and orthographic views with dimensions.

Isometric View: Shows the connector assembly with a grey rectangular housing, a white cable, and a yellow M3-6H connector. The cable length is 33.

Orthographic Views:

- Top View:** Shows the connector's footprint with dimensions: 36.4 (total width), 12 (distance from left edge to center of mounting hole), 23.6 (distance from right edge to center of mounting hole), 13 (distance from top edge to center of mounting hole), and 10 (distance from left edge to center of mounting hole).
- Front View:** Shows the connector's profile with dimensions: 24.5 (total height), 13.5 (distance from bottom edge to center of mounting hole), and 6.5 DEEP (depth of the connector).
- Side View:** Shows the connector's side profile with dimensions: 15 (distance from left edge to center of mounting hole) and 6 (distance from right edge to center of mounting hole).
- Bottom View:** Shows the connector's bottom profile with dimensions: 22 (distance from top edge to center of mounting hole), 15.8 (distance from left edge to center of mounting hole), 6 (distance from right edge to center of mounting hole), and 3 (distance from bottom edge to center of mounting hole).

Mounting Holes:

- Clearance Mounting 2 Holes $\varnothing 3.6$ through:** Two holes located on the top and bottom edges of the connector.
- Mounting 2 Holes M3-6H $\times$ 6 tapped:** Two holes located on the left and right edges of the connector.

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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. 29	建议驱动更新	/

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