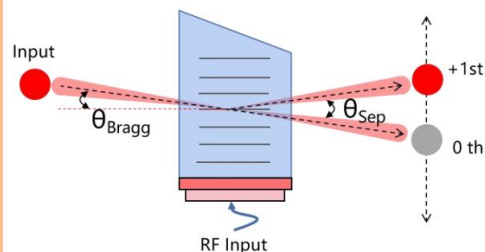


## AOM Specifications 声光调制器产品规格书 M0021-QL100-075-355



### 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)            | 355nm                                 |
| Polarization (光偏振)                     | Linear, vertical to base (线偏振, 垂直于基座) |
| Transmission (透过率)                     | > 93%                                 |
| Active aperture (有效孔径)                 | 7.5mm                                 |
| Center frequency (Fc) (中心频率)           | 100MHz                                |
| Diffraction efficiency (衍射效率)          | >85%                                  |
| RF power (射频功率)                        | 20W (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         | 355  |
| Bragg angle (布拉格角) -mrad     | 5.3  |
| Separation angle (分离角) -mrad | 10.5 |

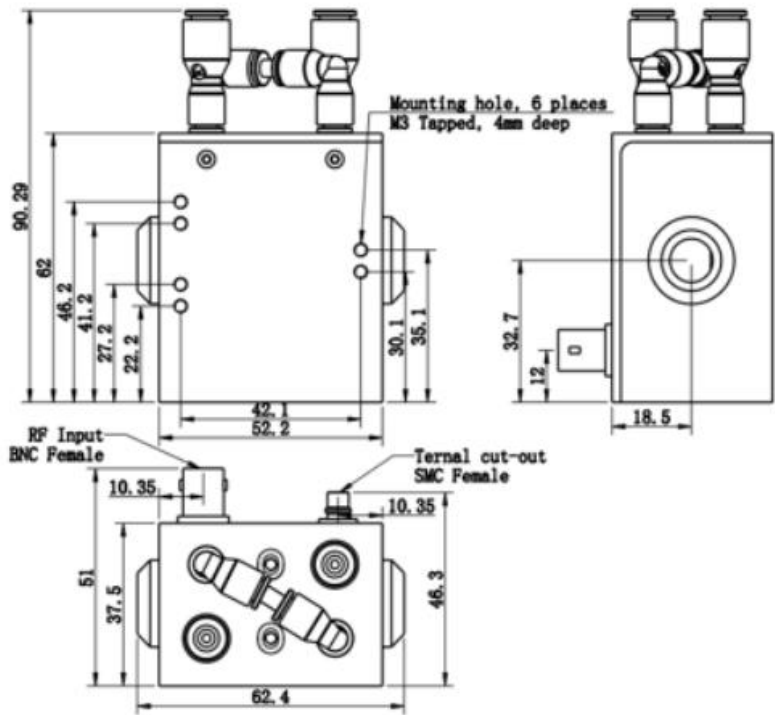
### 3. ESTIMATED PERFORMANCE vs. BEAM DIAMETER (预估性能 vs. 光束直径)

|                                   |     |     |     |
|-----------------------------------|-----|-----|-----|
| Beam diameter (光束直径) -mm          | 1   | 3   | 6   |
| Rise time (上升沿时间) -ns             | 113 | 339 | 678 |
| 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               | Q | Longitudinal  | L   | 027             | 040 | 4 mm       | 1030 1030 nm |
|       | TeO <sub>2</sub> | T | Shear         | S   | 041             | 060 | 6 mm       | 1064 1064 nm |
|       | Ge               | G |               |     | 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)

RD1026-100-24-020-CA

7. REVISION (版本)

| Number<br>(版本号) | Revisions date<br>(修订日期) | Revision<br>(修改项目) | Revision description<br>(修订内容说明) |
|-----------------|--------------------------|--------------------|----------------------------------|
| A               | 2022. 7. 27              | New                | /                                |

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