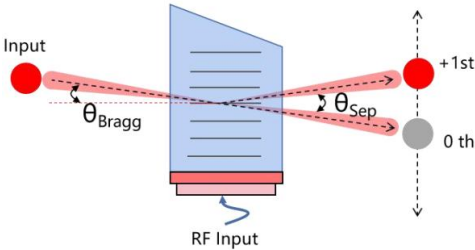


A0FS Specifications  
声光移频器产品规格书  
FS1018-TS075\_000-015-633



1. SPECIFICATIONS (规格)

|                                        |                                         |
|----------------------------------------|-----------------------------------------|
| Interaction material (介质材料)            | Tellurium dioxide (二氧化碲)                |
| Acoustic mode (声波模式)                   | Shear (切变波)                             |
| Operating wavelength (工作波长)            | 633nm                                   |
| Polarization of incident beam (入射光偏振)  | Linear, horizontal to base (线偏振, 水平于基座) |
| Polarization of 1st order beam (1级光偏振) | Linear, vertical to base (线偏振, 垂直于基座)   |
| Polarization of 0 order beam (0级光偏振)   | Linear, horizontal to base (线偏振, 水平于基座) |
| Transmission (透过率)                     | > 98%                                   |
| Active aperture (有效孔径)                 | 1.5mm                                   |
| Center frequency (Fc) (中心频率)           | 75MHz                                   |
| Frequency shift / °C (移频量)             | 0MHz                                    |
| Frequency drift / °C (频漂)              | < ±0.1ppm                               |
| Diffraction efficiency (衍射效率)          | > 80%                                   |
| RF power (射频功率)                        | 0.5W (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)                    |

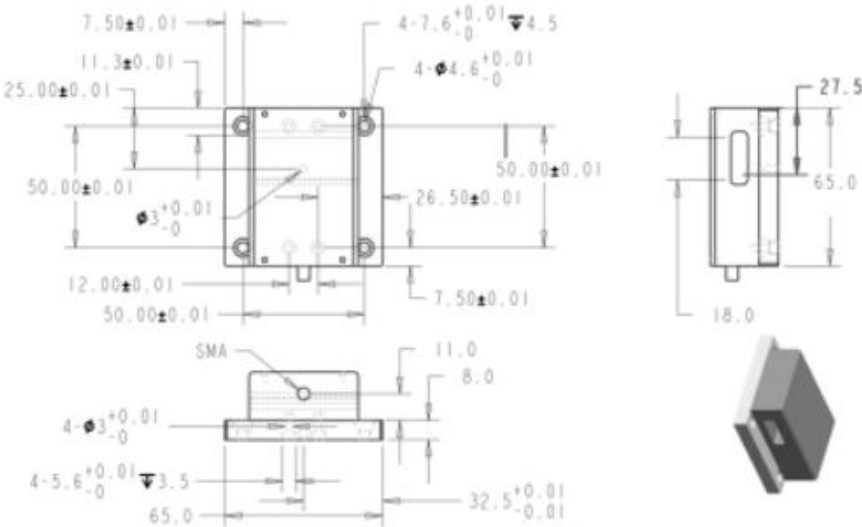
2. PERFORMANCEvs. WAVELENGTH (性能vs. 波长)

|                            |          |
|----------------------------|----------|
| Wavelength (光波长)           | 633nm    |
| Separation angle (分离角) @Fc | 72.7mrad |

3. ORDERING CODES (编码规则)

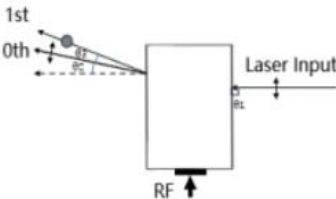
|        | Materials          | Acoustic type  | Fc            | DB         | Active aperture | Wavelength   |
|--------|--------------------|----------------|---------------|------------|-----------------|--------------|
| FS0001 | — X                | X              | XXX           | — XXX      | — XXX           | XXXX         |
|        | QZ Q               | Longitudinal L | 27.12 MHz 027 | 000 0 MHz  | 040 4 mm        | 1030 1030 nm |
|        | TeO <sub>2</sub> T | Shear S        | 40.68 MHz 041 | 003 3 MHz  | 060 6 mm        | 1064 1064 nm |
|        | Ge G               |                | 80 MHz 080    | 010 10 MHz | 080 8 mm        | 9600 9600 nm |

4. DIMENSIONS (外形尺寸-mm)



5. SUGGESTED RF DRIVER ELECTRONICS (建议驱动型号)

Input angle  $\theta_1$  (入射角):  $00^\circ \pm 2^\circ$   
Output angle  $\theta_2$  (出射角):  $5.6^\circ \pm 1^\circ$   
Separation angle  $\theta_3$  (分离角):  $4.1^\circ \pm 0.5^\circ$



6. SUGGESTED RF DRIVER ELECTRONICS (建议驱动型号)

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               | 2024. 8. 24              | New                | /                                |

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