



## 上海尖丰光电技术有限公司

---

OH1 有机晶体

品牌： Rainbow Photonics

型号： OH1

**OH1：**

**(2-(3-(4-Hydroxystyryl)-5,5-dimethylcyclohex-2-enylidene)malonitrile)**

**特点：**

- 高质量晶体
- 可应用于各种领域内切割和抛光
- 非常大的非线性光学系数
- 大的电光系数
- 在 120nm 和 1460nm 赫兹波发生相匹配

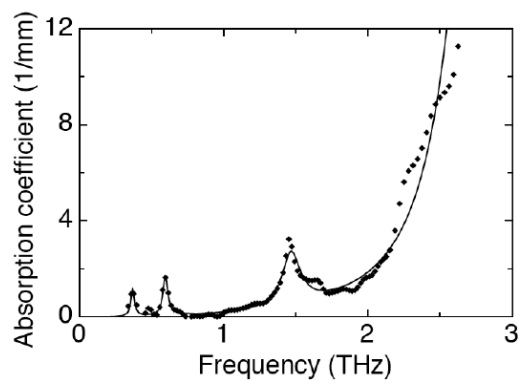
● **应用：**

- Efficient THz generation and detection from 0.1 to >10 THz
- Fast electro-optic modulation
- Optical parametric generation
- Efficient frequency doubling of 1.55  $\mu\text{m}$  radiation

## Physical Properties

|                                                        |                                                                                                                                                                                                                         |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| melting point                                          | 212 °C                                                                                                                                                                                                                  |
| point group symmetry                                   | mm2                                                                                                                                                                                                                     |
| refractive indices                                     | $n_2 = 1.58, n_3 = 2.15$                                                                                                                                                                                                |
| nonlinear coefficients ( $\lambda = 1.9 \mu\text{m}$ ) | $d_{333} = 120 \pm 10 \text{ pm/V}$<br>$d_{223} = 13 \pm 2 \text{ pm/V}$<br>$d_{322} = 8.5 \pm 2 \text{ pm/V}$                                                                                                          |
| electro optic coefficients                             | $r_{333} (633 \text{ nm}) = 109 \pm 4 \text{ pm/V}$<br>$r_{333} (785 \text{ nm}) = 75 \pm 7 \text{ pm/V}$<br>$r_{333} (1064 \text{ nm}) = 56 \pm 2 \text{ pm/V}$<br>$r_{333} (1319 \text{ nm}) = 52 \pm 7 \text{ pm/V}$ |

## Absorption Spectrum



## THz Conversion Efficiency

