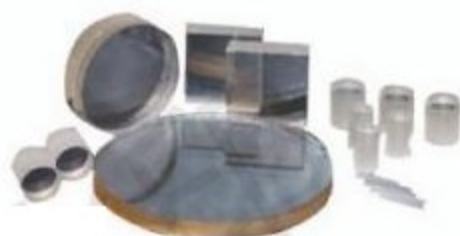


# 铽镓石榴石TGG

## 简介 Introduction:

TGG是出色的磁光晶体材料，应用于各类法拉第隔离器和旋光器上，适用波长为400nm-1100nm范围（475-500nm除外）

TGG is an excellent magneto-optical crystal used in various Faraday devices (Rotator and Isolator) in the range of 400nm-1100nm, excluding 475-500nm.



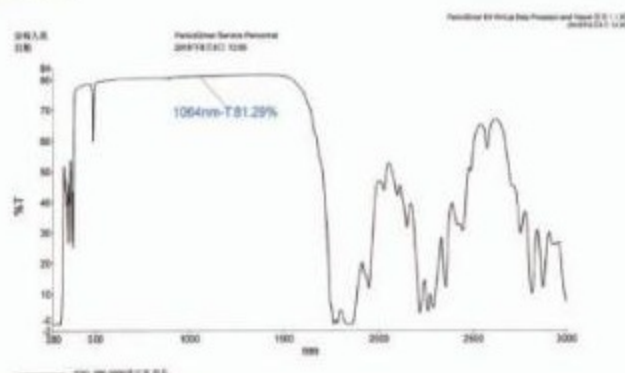
### 主要优点：

- ◆ 大的磁光常数(40 Rad T-1 m-1)
- ◆ 低的光损失(<0.1%/cm)
- ◆ 高热导性(7.4W m-1K-1)
- ◆ 高激光损伤阈值(>1GW/cm<sup>2</sup>)

### Main Advantages:

- ◆ Large Verdet Constant (35 Rad T-1 m-1)
- ◆ Low optical losses (<0.1%/cm)
- ◆ High thermal conductivity (7.4W m-1K-1)
- ◆ High laser damage threshold (>1GW/cm<sup>2</sup>)

## 透射曲线Transmission Curve:



## 材料特性 Material Properties:

分子式 Chemical Formula	Tb <sub>3</sub> Ga <sub>5</sub> O <sub>12</sub>
晶格参数 Lattice constant	Czochralski
密度 Density	7.13g/cm <sup>3</sup>
硬度 Hardness	8.0
熔点 Melting point	1725℃
折射率 Refractive Index	1.954 at 1064nm
维尔德常数 Verdet(rad/M/T)	190/134/40@532nm /633nm/1064nm

## 科瑞思创提供Crystro offers:

定向 Orientation	[111] ±15'
波前畸变 Wave Front Distortion	< λ/8
消光比 Extinction Ratio	> 35dB
直径公差 Diameter Tolerance	+0.00mm/-0.05mm
长度公差 Length Tolerance	+0.2mm/-0.2mm
倒角 Chamfer	<0.10mm@45°
平面度 Flatness	< λ/10 @ 633nm
平行度 Parallelism	< 30''
垂直度 Perpendicularity	< 5'
光洁度 Surface Quality	10/5
镀膜 AR Coating	<0.2%@1064nm
尺寸范围 Large Dimensions of Crystals	MaxΦ101.6 mm(4"inch)