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Online Inquiry

Contact: *

Company:

Subject: Yb:YAG

Tel:

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Content: *

Code: 5479

*(marked *should be filled)

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YB:YAG

Yb:YAG is one of the most promising laser-active materials and more suitable for diode-pumping than the traditional Nd-doped crystals. It can be pumped at 940 nm and generates 1.03 μ m laser output.

Compared with the commonly used Nd:YAG crystal, Yb:YAG crystal has a larger absorption bandwidth in order to reduce thermal management requirements for diode lasers, a longer upper-state lifetime, three to four times lower thermal loading per unit pump power.

Yb:YAG crystal is expected to replace Nd:YAG crystal for high power diode-pumped lasers and other potential applications, such as, its doubling wavelength is 515 nm very close to that of Ar-ion laser (514 nm), which makes it possible to replace large volume Ar-ion laser.

Advantages

Very low fractional heating, less than 11%

Very high slope efficiency Broad absorption bands, about 8nm@940nm

No excited-state absorption or up-conversion

Conveniently pumped by reliable InGaAs diodes at 940nm(or 970nm)

High thermal conductivity and large mechanical strength

High optical quality

Specifications

Doping	1atm%~ 30atm%
Orientation	<111> or <100>crystalline direction
Wavefront Distortion	$\lambda/8$ per inch @ 632.8 nm
Dimension Tolerances	rods with diameter: +0.0/-0.05mm , Length: \pm 0.1mm
Surface Quality	10/5 Scratch/Dig MIL-O-1380A
Parallelism	< 10"
Perpendicularity	< 5'
Clear Aperture	> 95%
Surface Flatness	< $\lambda/10$ @ 632.8 nm
Chamfer	< 0.1 mm @ 45°
Size	Upon customer request
Coating	AR/HR/PR coating upon customer's request

Thread rod, slabs, Er:YAG, Nd:YAG, Ce:YAG, Cr:YAG, Tm:YAG, Ho:YAG and other ion doped YAG crystals are also available.

INFORMATION

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WARRANTY

All products are guaranteed to be in specifications in material and workmanship for a period of 12 months after shipment.

We do not assume liability for installation, labor or consequential damages.

This warranty is not suitable for failure of the products due to misuse, abuse, accident, or neglect.

CONTACTS

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