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Online Inquiry

Contact: *

Company:

Subject: Nd:YAG

Tel:

E-mail: *

Content: *

Code: 1231

*(marked *should be filled)

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ND:YAG

Nd:YAG is the earliest and most famous laser host crystal, and it has been widely used laser crystal for solid-state laser.

Since it combines great advantages in many basic properties, Nd:YAG is the ubiquitous presence for near-infrared solid-state lasers and their frequency-doubler, tripler, and higher order multiplier.

Featured

High gain, High efficiency, Low threshold, Low loss at 1.06 μm

Good thermal conductivity and thermal shock characteristics

Mechanical strength, High optical quality

Various modes of operation (CW, pulsed, Q-switched, mode locked)

Optical Parameter of Nd:YAG crystal

Diameter (mm)	Standard grade	Excellence grade	Superexcellence grade
ϕ 3-6.35	≤ 0.5 fringes/ inch	≤ 0.25 fringes/ inch	≤ 0.1 fringes/ inch
	≥ 25 dB	≥ 28 dB	≥ 30 dB
ϕ 7-10	≤ 0.7 fringes/ inch	≤ 0.4 fringes/ inch	≤ 0.16 fringes/ inch
	≥ 22 dB	≥ 25 dB	≥ 28 dB
ϕ 11-13	≤ 1 fringes/ inch	≤ 0.6 fringes/ inch	≤ 0.2 fringes/ inch
	≥ 20 dB	≥ 23 dB	≥ 26 dB
ϕ 14-16	≤ 1.2 fringes/inch	≤ 0.8 fringes/inch	≤ 0.25 fringes/inch
	≥ 18 dB	≥ 20 dB	≥ 23 dB

Specifications

Nd Dopant Level	0.3-2 atm%
Orientation	$\langle 111 \rangle$ crystalline direction (± 0.5 deg)
Dimension Tolerances	Diameter: ± 0.05 mm
	Length: ± 0.5 mm
Wavefront Distortion	$\lambda/8@633$ nm
Surface Flatness	$\lambda/10@633$ nm
Parallelism	< 10 arc seconds
Perpendicularity	< 5 arc minutes
Surface Quality	10/5 Scratch and Dig
Clear Aperture	$> 95\%$
Chamfer	< 0.1 mm $\times 45^\circ$
AR Coating	Reflectivity $R < 0.25\% @ 1064$ nm per surface Damage threshold over $750 \text{ MW/cm}^2 @ 1064$ nm, 10 ns and 10 Hz
HR Coating	Standard $R > 99.8\% @ 1064$ nm and $R < 5\% @ 808$ nm, Other coatings are available per your request

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

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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

Deln Optics

E-mail: sales@delnoptic.com

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