

4.3. Ti:Sapphire Laser Crystals



Titanium doped Sapphire is the most widely used crystal generating ultra short femtosecond pulses, high gain and high power lasing.

Ti:Sapphire ($Al_2O_3:Ti_3+$) - titanium - doped sapphire crystals is the most widely used crystal for wavelength tunable lasers. It is also as excellent medium capable of generating ultra short pulse, high gain and high power lasing. Ti:Sapphire crystals can be effectively pumped by short pulse flashlamps in powerful laser systems. Also these crystals combine supreme physical and optical properties with broadest lasing range. Its indefinitely long stability and useful lifetime added to the lasing over entire band of 660-1050 nm challenge "dirty" dyes in variety of applications. Medical laser systems, lidars, laser spectroscopy, direct femtosecond pulse generation by Kerr-type mode-locking - there are few of existing and potential applications.

Standard specifications
End surfaces: Right angle cut or Brewster cut

When Ordering please specify
Shape: rectangular or round
Dimensions: (width x height) or diameter, length mm
End surfaces: Right angle cut or Brewster cut

Code	Name	Material	Concentration	Height (mm)	Width (mm)	Length (mm)	Shape	End Surfaces	Coating	Price	Currency
LAC23	Laser crystal	Ti:Sapphire		6	6	15	Rectangular	Right angle cut	uncoated	300,000	JPY
LAC24	Laser crystal	Ti:Sapphire		6		20	Round	Brewster angle cut	uncoated	306,000	JPY