

## Yttrium Aluminium Garnet (YAG)

<b>Formula</b>	Y <sub>3</sub> Al <sub>5</sub> O <sub>12</sub>
<b>Crystal Growth</b>	
Growth Method	Czochralski
Growth Direction	[111]
Max. Diameter (inch)	∅3"
<b>Crystallographic Properties</b>	
Crystal Structure	cubic
Lattice Constant (nm)	a = 1.2005
	without twins
<b>Physical Properties</b>	
Color	colorless
Density (g/cm <sup>3</sup> )	4.55
Melting Point (K)	2223
Thermal Expansion (10 <sup>-6</sup> K <sup>-1</sup> )	6.9
Thermal conductivity (W m <sup>-1</sup> K <sup>-1</sup> )	13
Hardness (Mohs)	8-8.5

