

Lanthanum Aluminate – Strontium Aluminium Tantalate (LSAT)

Formula	$\text{La}_{0.26}\text{Sr}_{0.76}\text{Al}_{0.61}\text{Ta}_{0.37}\text{O}_3$
Crystal Growth	
Growth Method	Czochralski
Max. Diameter (inch)	Ø2"
Growth Direction	[100]
Crystallographic Properties	
Crystal Structure	pseudocubic
Lattice Constant (nm)	a = 0.3868
	without twins
Physical Properties	
Color	colorless to light yellow
Density (g/cm^3)	6.74
Melting Point (K)	2113
Thermal Expansion (10^{-6}K^{-1})	10
Dielectric Constant	22
Loss Tangent (@ 77K, 10GHz)	2×10^{-4}
Hardness (Mohs)	6.5

