

Cadmium Telluride (CdTe)

Custom sizes and specifications are available

CRYSTALLOGRAPHIC

Syngony	Cubic
Symmetry Class	F43m
Lattice Constant, Angstrom	6.483

OPTICAL

Refractive Index at $n_{10.0}$	2.649
Refractive Index $n_{20.0}$	2.610
Transmission Range, microns	2-25
Absorbance $\mu(\lambda)$, cm^{-1} at 10 microns	0.167

THERMAL

Thermal Linear Expansion, deg C ⁻¹ for 0-30 deg C	4.5×10^{-6}
Thermal Conductivity, W/(m•deg C)	4.10
Specific Heat Capacity, J/(kg•deg C)	0.209
Melting Point, deg C	1092

MECHANICAL

Density, g/cm ³	5.86
Young Modulus (E), Pa	52×10^9
Poisson Ratio	0.41

CHEMICAL

Molecular Weight	240.01
Solubility in water, gram/100 cm ³	insoluble

Refr. Index n vs. Wavelength λ

WAVELENGTH, MICRONS	REFRACTIVE INDEX
6.0	2.656
8.0	2.654
10.0	2.649
12.0	2.644
14.0	2.637
16.0	2.629
18.0	2.620
20.0	2.610
22.0	2.598

Transmittance $\tau(\lambda)$ vs. Wavelength λ

