

PROPERTIES OF FLIR ZnS

MECHANICAL PROPERTIES

Young Modulus	: 74.5 GPa
Knoop Hardness	: 200-230 kg/mm ²
Modulus of Rupture	: 103.4 MPa at room temperature : 160 MPa a 660°C
Poisson constant	: 0.29
Density	: 4.09 g/cm ³

THERMAL PROPERTIES

Melting Point	: 1830°C
Max working temperature (with coating)	: 300°C
Heat Capacity	: 0.112 Cal/(g·°K)
Thermal Expansion Coefficient	: 7.85 10 ⁻⁶ °C ⁻¹
Thermal Conductivity	: 0.19 Wcm ⁻¹ ,K ⁻¹ at 27°C

OPTICAL PROPERTIES

Refraction Index at 20°C	: 2.419 at 0,5μm
	: 2.332 at 0,7μm
	: 2,292 at 1μm
	: 2,257 at 3μm
	: 2.246 at 5μm
	: 2.232 at 7μm
	: 2,221 at 8,20μm
	: 2.198 at 10,20μm
	: 2.186 at 11μm

TRANSMISSION CURVE (without coating)

