



POTAPENKO GLASS & FILTERS

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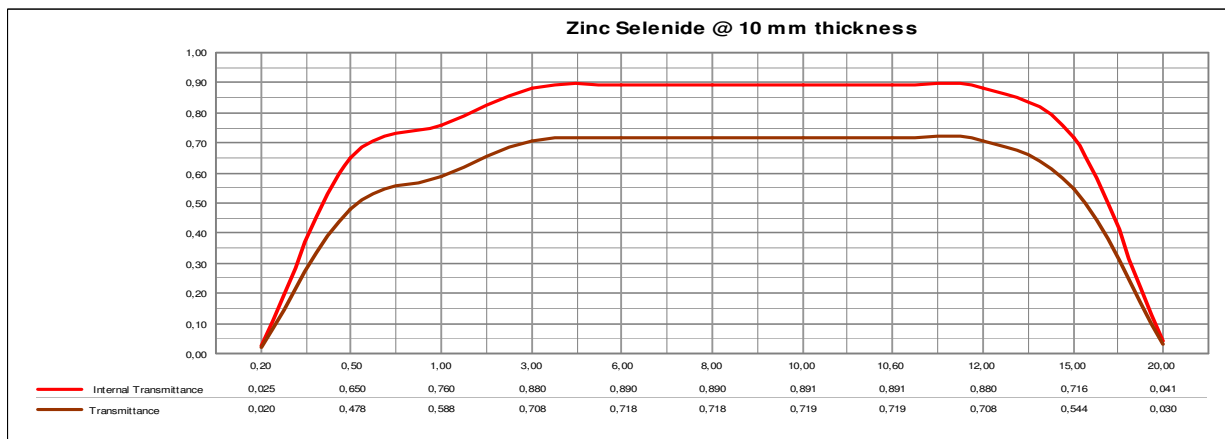
DATA SHEET- ZnSe optical grade

CRYSTAL ATTRIBUTES:

Formula		ZnSe
Zinc Selenide	%	99.9999
System		mono-crystal
Structure		cubic
Axis-a	Å	5.668
Axis-c	Å	5.668
Cleavage	along (110)	perfect
Colour		amber

OPTIC ATTRIBUTES:

		$\lambda, \mu\text{m}$	
(n) Index	$n_{10.6}$	10.6	2.403
(τ) Internal Transmittance, 10 mm	$\tau_{10.6}$	10.6	0.891
(T) Transmittance, 10 mm	$T_{10.6}$	10.6	0.720
(μ) Absorbance (Attenuation coeff)	cm^{-1}	10.6	≤ 0.005



MECHANIC ATTRIBUTES:

(SG) Specific gravity	g/cm^3	5.26
(r) Electric resistance	$\text{Ohm-cm}, 10^{10}$	≥ 10

THERMIC ATTRIBUTES:

(At) Melting point	$^{\circ}\text{C}$	1520
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OTHER ATTRIBUTES:

Workmanship (ST): optical standard grade		$\lambda, \mu\text{m}$	
ZnSe	%		99.9999
System			mono-crystal
Absorbance (Attenuation coeff)	cm^{-1}	10.6	≤ 0.005
Material Defects			minor
Colour			amber

RESUME:

The crystal system is due to 99.9999% zinc selenide. It's zinc selenide for IR-transmitter more 72% at lambda 10.60 μm . The standard is specification OCT-3-191-77. The crystal is typified as follows ZnSe optical grade.