

High-Efficiency Anti-Reflective (NAR) Coating on Zinc Sulfide

MultiSpectral (ZnS MS) for NIR, 1.03μm, 1.064μm, 1.07μm

COATING DATA SHEET

Application

This coating is designed to give low reflectance, low absorption and high transmittance. Especially useful for high power laser systems. This coating on ZnS MS will provide advantages over fused silica in high power applications due to its higher thermal conductivity and refractive index.

Spectral Performance

Transmission when measured on a 3mm thick ZnS MS substrate coated on both surfaces with the NAR coating.

$T \geq 99.4\%$ at 1μm (typically ~ 99.6%)

Reflection from a single surface when coated with the NAR coating.

$R \leq 0.2\%$ per surface

Absorption for a 3mm thick ZnS MS substrate coated on both surfaces with the AR coating.

$A \leq 0.05\%$ per surface

Environmental Performance

This coating is designed to meet durability requirements for the following MIL specifications:

Adhesion	MIL-C-48497 MIL-C-675C
Humidity	MIL-C-48497 MIL-C-675C
Moderate Abrasion	MIL-C-48497 MIL-C-675C

