

CO 4004E Ge 8-12

Hard Carbon antireflection coating with enhanced salt resistance for Germanium 8 - 12 μm

DESCRIPTION

This coating is designed for outer surface (O.S.) applications where severe environmental conditions, particularly salt spray and salt fog, are likely to be encountered.

The coating is designed for such applications as:
exposed optical surfaces of hand-held or vehicle-mounted thermal imaging systems;
exposed optical surfaces of airborne or naval FLIR systems;
exposed window surfaces where windscreen wiper or chemical attack is to be endured.

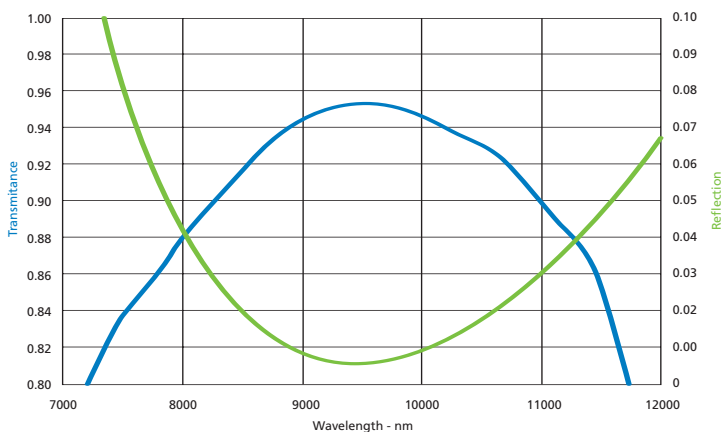
SPECTRAL PERFORMANCE

Transmission values are for 1 mm thick Germanium substrate which has been coated on one surface with CO 4004 and on the second surface with CO 4009 (High Efficiency coating).
TRANSMISSION > 90% (average) from 8 - 11.5 μm

Reflection values are for a single germanium surface coated with CO 4004.
REFLECTION < 3% (average) from 8 - 11.5 μm

ENVIRONMENTAL PERFORMANCE

The coating will withstand the following environmental tests which will be carried out on a representative witness piece coated in the same batch.



ADHESION	MIL-C-48497 TS1888	para 4.5.3.1 para 5.1
HUMIDITY 7 days	MIL-C-48497 TS1888	para 4.5.3.2 para 5.2.1.2
ABRASION windscreen wiper	TS1888 (O.S.)	para 5.4.3 para 5.4.3
SALT FOG For 90 days	MIL-STD-810C	para 509.1