

CO 4004 Ge 8-12

Hard Carbon antireflection coating
for Germanium
8 - 12 μm

DESCRIPTION

This coating is designed for outer surface (O.S.) applications where severe environmental conditions are likely to be encountered.

The coating will operate undamaged under conditions such 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.

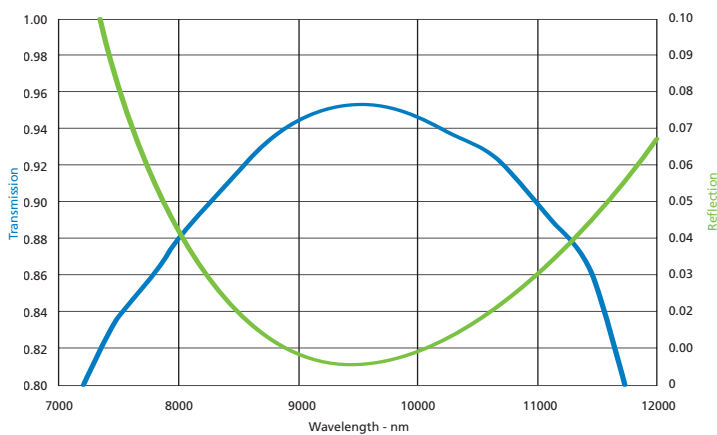
SPECTRAL PERFORMANCE

Transmission values are for a 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
SALT FOG For 24 hours	MIL-STD-810C	para 509.1