

Diamond Like Carbon 8µm-12µm

UCS_GE_03_DLC



This is an extremely rugged and abrasion resistant anti reflection coating for use in the $8-12\mu$ m waveband. These properties make it ideal for external surface applications where extreme environmental conditions will be encountered such as marine environments.

It is normally used in conjunction with a high efficiency antireflection coating (UCS_GE_01) on the second surface.

Spectral - additional

Transmission (Average)	>89% 8µm-12µm	For a 1mm thick witness piece, coated one side UCS_Ge_03 and one side UCS_Ge_01.
Reflection (Average)	<3% 8μm-12μm	Per surface, from a single side coated 1mm thick witness piece, coated with UCS_Ge_03
Angle of Incidence	0°-20°	

Environmental Properties

Adhesion	MIL-C-48497A, 08/09/1980, para 4.5.3.1	
Adhesion Remark	Tape Test	
Humidity	MIL-C-48497A, 08/09/1980, para 4.5.3.2	
Humidity Remark	24Hrs, 49°C, 95-100% relative humidity	
Abrasion	MIL-C-48497A, 08/09/1980, para 4.5.5.1	
Abrasion Remark	Severe, 20 Strokes Eraser	
Salt spray	MIL-C-675C, 22/08/1980, para 4.5.9	
Salt spray Remark	200hrs salt spray fog exposure	
Salt Soln	MIL-C-48497A, 08/09/1980, para 4.5.5.2	
Salt Soln Remark	24hrs immersion in salt water	
Solubility	TS1888, 01/07/1979, para 5.2.2.1	
Solubility Remark	28 days immersion in water	



Environmental - additional

Wiper Test

10,000 wipes with windscreen wiper in water/sand slurry.

Sizes

Up to 275mm diameter

