

[All Products](#) / [Optics](#) / [Windows and Diffusers](#) / [UV and IR Windows](#)
TECHSPEC®

Diamond-Like Carbon (DLC) Coated Germanium Windows



- Meets Severe Abrasion Requirements of MIL-C-675C
- $\geq 90\%$ Transmission from 8 - 11.5 μm
- Ideal for Harsh Environments
- [Uncoated, 3-5 Micron BBAR, and 8 - 12 Micron BBAR Coated Germanium Windows](#) are also Available
- Due to material supply chain disruptions with germanium, there may be increased lead times and price changes on our germanium products. For more information, please contact our [customer service team](#).
- Edmund Optics has limited remaining inventory of this part number and no raw material available to supply more once this is depleted. Please contact our Product Support Engineers to help with an alternate solution for your needs. Customer Service can provide you the latest price and availability.

Common Specifications

General

Note:

Arrow on substrate edge points towards DLC coated surface

Physical & Mechanical Properties

Bevel: Protective as needed

Clear Aperture (%): 90

Edges: Fine Ground

Knoop Hardness (kg/mm²): 780

Parallelism (arcmin): <1

Optical Properties

Coating Specification: AR: $R_{\text{avg}} \leq 0.5\%$ @ 8000 - 12000nm

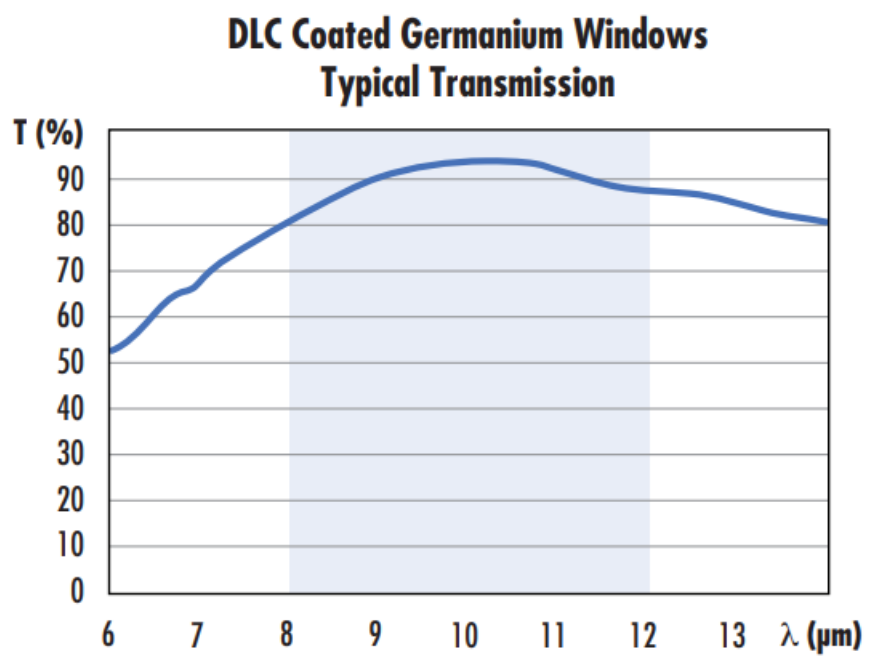
Substrate: Germanium (Ge)

Surface Quality: 60-40

Wavelength Range (nm): 8000 - 12000

Coating Temperature (°F):	AR: -80 to +160 per MIL-C-48497A Paragraph 4.5.4.1 DLC: -80 to +160 per MIL-M-13508C Paragraph 4.4.4	
Environmental & Durability Factors		
Coating Abrasion:	AR: Moderate, per MIL-C-48497A Paragraph 4.5.3.3 DLC: Severe, per MIL-C-675C Paragraph 4.5.10	
Coating Adhesion:	AR: per MIL-C-48497A Paragraph 4.5.3.1 DLC: per MIL-M-13508C Paragraph 4.4.6	Coating Humidity: AR: per MIL-C-48497A Paragraph 4.5.3.2 DLC: ≥24 Hours per MIL-C-675C paragraph 4.5.8
Coating Salt Solubility:	AR: N/A DLC: ≥24 Hours Immersion per MIL-C-675C paragraph 4.5.7	Coating Salt Spray: AR: N/A ≥24 Hours per MIL-C-675C paragraph 4.5.9
Coating Solubility and Cleaning:	AR: per MIL-C-48497A Paragraph 4.5.4.2 DLC: N/A	Coating Wiper Durability: AR: N/A DLC: ≥5,000 Wipes of Sand/Slurry per TS-1888

Technical Information



Products

Dia. (mm)	Thickness (mm)	Coating	Stock Number	Price	Buy
50.00	3.00	S1: DLC Coating S2: BBAR (8000-12000nm)	#13-798	₹1,44,420	Contact Us
100.00	6.00	S1: DLC Coating S2: BBAR (8000-12000nm)	#21-087	₹4,43,700	10 to 12 days



Copyright 2023, Edmund Optics India Private Limited, #267, Greystone Building, Second Floor, 6th Cross Rd, Binnamangala, Stage 1, Indiranagar, Bengaluru, Karnataka, India 560038

Phone: 1-800-363-1992 :

www.edmundoptics.com