

Arlon® 1287 LI

Carbon-Fiber, Reinforced Polyketone-Based, High-Performance Components

Plastic Components

Greene Tweed offers precision plastic components for a variety of demanding semiconductor applications. These components are made from a full range of high-performance plastic materials, including Arlon® 1287 LI, which is ideal for applications requiring exceptionally high physical properties, wear resistance, and chemical compatibility.

Typical Properties	
Physical Properties (ASTM Standard)	Typical
Color	Black
Specific Gravity (D792)	1.47
Hardness, Shore D (D2240)	93
Water Absorption, 24 Hours, % (D570)	0.08
Mechanical (ASTM Standard)	
Tensile Strength, psi (kPa) (D638)	35,100 (242,000)
Elongation, % (D638)	1.1
Flexural Strength, psi (kPa) (D790)	50,000 (344,800)
Flexural 0.5% Secant Modulus, psi (MPa) (D790)	4,040,000 (27,900)
Coefficient of Dynamic Friction PV=12,600 psi ft/min. (G77)	0.14
Wear Factor, in. ³ -min./lb-ft-hr x 10 ⁻¹⁰ (G77)	120
Thermal (ASTM Standard)	
Heat Distortion Temperature Under Load, @ 264 psi, °F (°C) (D648)	600 (316)
Coefficient of Thermal Expansion, <300°F (149°C), in./in./°F x 10 ⁻⁶ (D696)	5
Coefficient of Thermal Expansion, >300°F (149°C), in./in./°F x 10 ⁻⁶ (D696)	12



Features and Benefits

- Excellent physical properties
- Excellent wear resistance
- Excellent chemical compatibility
- Impact resistance
- High performance over wide range of operating conditions

Applications

- CMP retainer rings
- Guides
- Supports