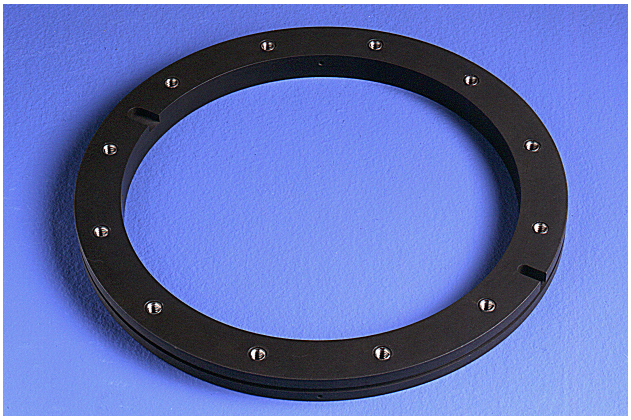
# Arlon® 1260

## 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® 1260, which is ideal for applications requiring high impact and wear and chemical resistance.

| Typical Properties | |
|---|---|
| **Physical Properties** | **Typical** |
| Color | Black |
| Specific Gravity | 1.41 |
| Melt Point (Pellet), °F (°C) | 649 (343) |
| Hardness, Shore D | 92 |
| Water Absorption, 24 Hours, % | 0.08 |
| **Mechanical** | |
| Tensile Break Strength, psi | 33,400 |
| Elongation, % | 1.7 |
| Flexural Strength, psi | 50,300 |
| Flexural 0.5% Secant Modulus, psi | 2,750,000 |
| Compressive Strength @ Break, psi | 38,000 |
| Coefficient of Dynamic Friction PV=12,600 psi ft/min. | 0.18 |
| Wear Factor, $in.^3$-min./lb-ft-hr x $10^{-10}$ | 230 |
| **Shear Strength @ Room Temperature** | |
| Axial, psi | 17,400 |
| Transverse, psi | 13,900 |
| **Shear Strength @ 450°F (232°C)** | |
| Axial, psi | 4,150 |
| Transverse, psi | 2,800 |
| **Izod Impact Strength** | |
| Notched, ft-lb/inch | 1.65 |
| Unnotched, ft-lb/inch | 7.60 |



| Typical Properties (continued) | |
|---|---|
| **Thermal** | **Typical** |
| Heat Distortion Temperature Under Load, @ 264 psi, °F (°C) | 600 (316) |
| Coefficient of Thermal Expansion, <300°F (149°C), inch/inch per °F x $10^{-5}$ | 0.7 |
| Coefficient of Thermal Expansion, >300°F (149°C), inch/inch per °F x $10^{-5}$ | 1.7 |

### Features and Benefits

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

### Applications

- CMP retainer rings
- Supports
- Guides