



COMPOUND: A457

POLYMER: Polyetheretherketone (PEEK)

DESCRIPTION: Bearing and Wear grade PEEK Compound. Compression molded stock shapes and machined parts.

Property	Test Method	Internal Specification Values	Typical Values	Units
Specific Gravity	ASTM D792	1.45 ± .03	1.45	-
Hardness	ASTM D2240	85 ± 5	85	SHORE-D
Tensile Strength at Break	ASTM D1708	8,000 (55.16) Minimum	9,500 (65.50)	PSI (MPa)
Elongation at Break	ASTM D1708	2.00 Minimum	3.50	%
Tensile Modulus	ASTM D1708		275 (1.90)	KSI (GPa)
Wear Test Properties @ 200 PSI, 100 FPM, against Carbon Steel Coefficient of Friction Wear Rate	ASTM D3702	---	0.46 1.85 X 10 ⁻⁵	Inch/Min
Coefficient of Linear Thermal Expansion 70 - 200 °F (21.1 – 93.3 °C) 70 - 300 °F (21.1 – 148.9 °C) 70 - 400 °F (21.1 – 204.4 °C) 70 - 500 °F (21.1 – 260.0 °C)	ASTM E831	---	1.69 / 2.94 (3.04 / 5.29) 1.76 / 3.25 (3.17 / 5.85) 1.92 / 4.59 (3.46 / 8.26) 2.17 / 5.80 (3.91 / 10.44)	Axial / Transverse X 10 ⁻⁵ °F ⁻¹ (°C ⁻¹)

REVISION HISTORY

REV. NONE – Initial Release 10/29/2015 – Raju K

REV. A - Updated Hardness spec & typical values and CTE test data. Also updated data sheet format on new template