



COMPOUND: 711

POLYMER: Polytetrafluoroethylene (PTFE)

DESCRIPTION: 25% Carbon-Graphite Filled PTFE, Compression and Isostatic Molded Stock Shapes and Machined parts

Property	Test Method	Internal Specification Values	Typical Values	Units
Specific Gravity	ASTM D792	2.08 – 2.11	2.10	-
Hardness	ASTM D2240	60 - 70	64	SHORE-D
Tensile Strength at Break	ASTM D1708	2,300 (15.86) Minimum	2,900 (19.99)	PSI (MPa)
Elongation at Break	ASTM D1708	160 Minimum	190	%
Deformation Under Load, 24 HRS @ 2,000 PSI, 73 °F Permanent Deformation after 24 HRS Relaxation	ASTM D621		2.78 (Axial) 2.77 (Radial) 1.22 (Axial) 2.45 (Radial)	%
Coefficient of Linear Thermal Expansion, Transverse 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 E861		5.09 (9.16) 5.52 (9.94) 6.23 (11.21) 7.34 (13.20)	X 10 ⁻⁵ °F ⁻¹ (°C ⁻¹)
Coefficient of Linear Thermal Expansion, Axial 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 E861		6.93 (12.47) 7.69 (13.84) 8.61 (15.51) 10.09 (18.16)	X 10 ⁻⁵ °F ⁻¹ (°C ⁻¹)

REVISION HISTORY

REV. NONE – Initial Release, 02-03-2011 BJ
 REV. A – Updated Data Sheet Format, 10-28-2011 RSK
 REV. B – Modified typical property values – Tensile, Elongation, Hardness, Specific Gravity and Deformation under load. Added CTE values. Deleted Applications/Compliance table. Updated data sheet format, 9-22-2020 RSK

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