

Semitron® ESd HPV PEEK

Semitron® ESd HPV PEEK is an extruded Static Dissipative PEEK-based polymer, specifically developed for electronic fixture applications that require a high degree of dimensional stability over an extended thermal range, as well as precise machinability.

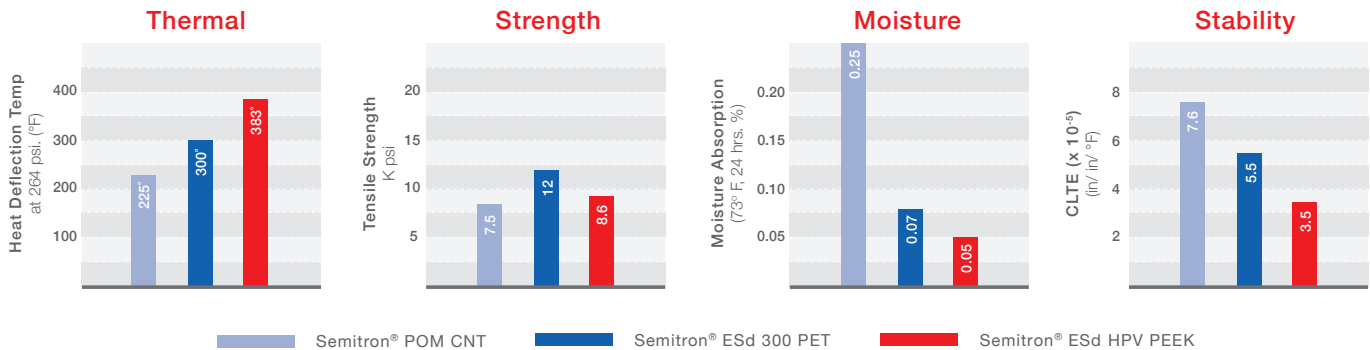


Key Benefits

- Delivers a flexural modulus of 760,000 psi along with a melting point of 644°F
- Extremely low moisture absorption of 0.05% @ 24 hours and 0.35% @ saturation

Common Applications

- Integrated Chip Trays and Carriers
- PCB Board Manufacturing and Handling
- Fixturing for Electronic Assemblies



Data Sheet

Properties	ASTM Test Method	Semitron® POM CNT	Semitron® ESd 300 PET	Semitron® ESd HPV PEEK	Semitron® ESd 480 PEEK
Melting Point (°F)	D3418	335	485	644	644
Surface Resistivity (Ω/sq)	-	10 ⁶ -10 ⁹	10 ⁵ -10 ⁹	10 ⁶ -10 ⁹	10 ⁶ -10 ⁹
HDT @ 264psi (°F)	D648	225	240	383	500
Hardness Rockwell @73°F	D785	M71	R1256	M90	M107
CLTE (in/in/°F, X 10 ⁻⁵)	E-831	7.6	3.1	3.5	1.7
Flexural Modulus (psi)	D790	350,000	490,000	760,000	1,000,000
Tensile Strength (psi)	D638	7,500	11,500	8,600	14,500
Tensile Mod. of Elasticity (psi)	D638	340,000	500,000	775,000	940,000
Water Absorption (% by wt.)	D570	0.25	0.07	0.05	0.18
Water Absorption at Saturation (% by wt.)	D570	0.75	0.12	0.35	1.65
Relative Price (\$)	-	\$	\$\$\$	\$\$\$\$	\$\$\$\$-\$\$\$\$

(1) Semitron® ESd HPV PEEK data based on preliminary testing.

 - Advantage

 - Strong Advantage

 - Best in Class

Semitron® ESd HPV PEEK Available Sizes

	Thickness	Plate Size (mm.)	Plate Size (in.)
Semitron® ESd HPV PEEK	5mm	525 x 1000	20.6" x 40"
	6mm/0.25"	525 x 1000	20.6" x 40"
	8mm	525 x 1000	20.6" x 40"
	10mm	525 x 1000	20.6" x 40"
	12mm/0.5"	625 x 1000	24.6" x 40"
	15mm	625 x 1000	24.6" x 40"
	16mm/0.75"	625 x 1000	24.6" x 40"
	20mm	625 x 1000	24.6" x 40"
	25mm/1.0"	625 x 1000	24.6" x 40"
	30mm/1.25"	625 x 1000	24.6" x 40"

* Rod available in sizes ranging from 1.25" to 4" diameter

* 0.5mm must be removed from the surface to achieve listed surface resistivity

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