



MITSUBISHI CHEMICAL
ADVANCED MATERIALS

Semitron® HPV PEEK

Static Dissipative PEEK Based Value Added Polymer System

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

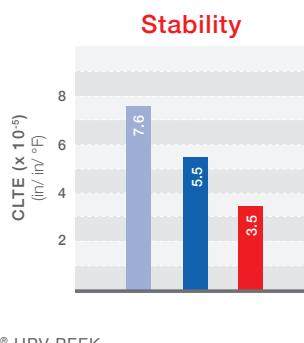
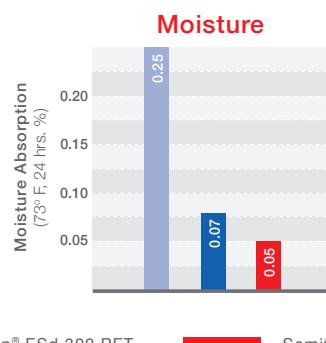
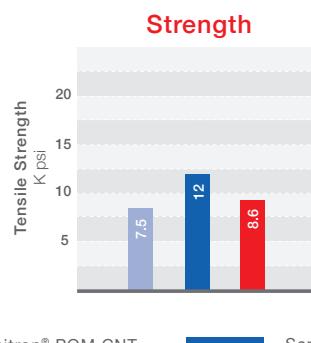
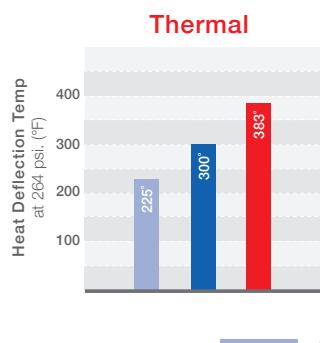


Key Benefits

- 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 & Carriers
- PCB Board Manufacturing & Handling
- Fixturing for Electronic Assemblies



Data Sheet

Properties	ASTM Test Method	Semitron® POM CNT	Semitron® ESd 300 PET	Semitron® HPV PEEK	Semitron® ESd4 80 PEEK
Melting Point (°F)	D3418	335	485	644	644
Surface Resistivity (Ω/sq)	-	10 ⁶ ~10 ⁹			
HDT @ 264psi (°F)	D648	225	~300	383	500
Hardness Rockwell @73°F	D785	M71	R1256	M90	M107
CLTE (in/in/°F, X 10 ⁻⁵)	E-831	7.6	5.5	3.5	1.7
Flexural Modulus (psi)	D790	350,000	477,000	760,000	1,000,000
Tensile Strength (psi)	D638	7,500	12,000	8,600	14,500
Tensile Mod. of Elasticity (psi)	D638	340,000	490,000	1,100,000	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® HPV PEEK data based on preliminary testing.

- Advantage

- Strong Advantage

- Best in Class

Semitron® HPV PEEK Available Sizes

Semitron® HPV PEEK	Thickness	Plate Size (mm.)	Plate Size (in.)
	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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