
Product Data Sheet

Nemcon™ H PK DP110/X5

Nemcon™ H-series products are designed for use in high performance electronic assemblies where heat removal is critical to system performance. Nemcon™ H PK DP110/X5 is a thermally conductive polyetheretherketone, offering excellent chemical resistance, good stiffness and high HDT. It should be used in demanding applications where thermal management must be accomplished in harsh environments.

Typical Applications

- Housings for power components, such as motors, coils, and transformers.
- IC thermal management components, such as heat sinks, heat spreaders, or heat pipes.
- Critical military/aerospace applications involving severe environments.

Properties*	Standard	Unit	Typical Value
Physical			
Specific Gravity	D 792		1.52
Mechanical			
Tensile Stress @ yld, 50 mm/min	D 638	MPa.	75
Tensile Strain @ brk, 50 mm/min	D 638	%	2.5
Tensile Modulus, 50 mm/min	D 638	MPa.	6250
Flexural Stress @ yld, 1.3 mm/min, 50 mm span	D 790	MPa.	135
Flexural Modulus, 1.3 mm/min, 50 mm span	D 790	MPa.	7050
Izod Impact, notched @ 23°C	D 256	J/m	32.5
Thermal			
HDT @ 264 psi, 3.2 mm, unannealed	D 648	°C	206
Glass Transition Temperature	D 3482	°C	150
Conductivity			
Thermal Conductivity	E 1461	W/mK	3.1
Electrical - Surface Resistivity	D 257	Ohms/sq.	8.0E+12

*All properties are measured after 48 hours of conditioning at 23°C and 50% relative humidity. All samples are prepared according to ASTM standards. Variations within normal tolerances are possible for various types of colors and functional properties like UV resistance.

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