## New Ceramic-Filled PEEK for High-Performance IC Test Sockets

## CeramaPEEK® Test Socket Plate

**CeramaPEEK** ® is a proprietary ceramic filled compound created to meet the requirements for tight tolerance, high frequency chip socket test fixtures.

## **Key Features of CeramaPEEK®**

**Exceptional dimensional stability:** low moisture absorption, low creep, high modulus, metal-like CLTE, low coefficient of hygroscopic expansion

Machinable to very tight tolerances: low burring, compatible with tight pitch and fine diameter holes Good abrasion resistance and ductility: maintains tolerances after 100,000 chip insertions, good impact properties

Very stable electrical properties: low moisture absorption and intrinsically good electrical insulator Thermal stability: Compatible with wide temperature range, maintains physicals with after heat aging Available in Large Plates: CeramaPEEK ® is available in large 24" x 24" (610mm x 610mm) plates. Economical: CeramaPEEK ® is more economical than competing injection-molded products.

General	ASTM Test Method	Result
Specific Gravity	D792	1.51
Color		White
Moisture Absorption	D570	0.2%
State State		
Mechanical		
Tensile Strength	D638	13,000 psi
Tensile Modulus	D638	650,000 psi
Flexural Strength	D790	23,000 psi
Flexural Mo <mark>dulu</mark> s	D790	650,000 psi
Compressive Strength	D695	17,000 psi
Electrical	ASTM Test Method	Result
Dielectric Strength	D149	400 V/mil
Dielectric Constant	D150	3.5 KHz @ 1 KHz
Dissipation Factor	D150	< 0.0050
Volume Resistivity	D257	> 10 <sup>15</sup> ohm-cm
Surface Resistivity	D257	> 10 <sup>13</sup> ohm
Thermal	ASTM Test Method	Result
HDT, method A	D698	>500° F
UL94	D3801	V-0 at 1.5mm
Tg	D3418	143°C
Thermal Conductivity		2 BTU-in/ft²-hr-°F
CLTE	E831	20 x <mark>10</mark> -6/°C

CeramaPEEK ® is available exclusively from:



## PROFESSIONAL PLASTICS, INC.

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