

## UNITREX® CM3801

## Ceramic Filled PEEK

Philadelphia • West Palm Beach • Chicago • Los Angeles • Fachbach, Germany



**UNITREX CM3801** extruded thermoplastic shapes provide users with improved physical properties compared to standard, unfilled PEEK grades through the addition of a proprietary ceramic filler. Additionally, this material offers Continuous Use Temperature of up to 480°F (249°C).

UNITREX CM3801 offers excellent dimensional stability and machinability for tight pitch/small diameter drilling operations and is especially well suited for IC test socket applications. Available in multiple rod and plate configurations by special order in natural white color.

## **Typical Physical Properties**

Property	Test Method	Unit	Nominal Value*
Mechanical			
Specific Gravity	ASTM D792		1.5
Tensile Strength	ASTM D638	psi	12,200
Tensile Elongation @ Break	ASTM D638	%	10
Tensile Modulus	ASTM D638	psi	638,000
Flexural Strength	ASTM D790	psi	23,200
Flexural Modulus of Elasticity	ASTM D790	psi	638,000
Izod Impact (notched)	ASTM D256	ftlb./in.	1.0
Rockwell Hardness	ASTM D785	M Scale	102
Thermal			
C.U.T. without impact	UL746B	°F	480
Glass Transition (Tg)	ASTM D3418	°F	290
HDT @ 66 psi	ASTM D648	°F	500
Melting Point	DSC	°F	645
Flammability	UL 94	@3.0mm	V-0
Electrical			
Dielectric Strength	ASTM D149	Volts/mil	400
Dissipation Factor	ASTM D150	1 Mhz	0.0005
Volume Resistivity	ASTM D 257	Ohm-cm x 10 <sup>15</sup>	1.0
Surface Resistivity	ASTM D 257	Ohm-cm x 10 <sup>13</sup>	1.0
Miscellaneous			
Color			White

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