

CerMax™ Dense Machinable Glass-Ceramic



- Machinable Dense Glass-Ceramics
- High Temperature & High Voltage use
- Readily Machined, no firing required
- Thermal Shock Resistance
- High Dielectric & Mechanical Strength

CerMax™ High Temperature Glass-Ceramic Machinable Forms

	MC-GC-P-L	MC-GC-P-H
Max Operating Temp	750°F / 400°C	1100°F / 593°C
Hardness	5.5	5.0
Specific Gravity g/cc	3.0	2.8
Density, lbs/in ²	.11	.10
Porosity, %	Nil	Nil
Thermal Expansion in/in/°F x 10 ⁻⁶	6.0 (10.8 for °C)	5.2 (9.5 for °C)
Compressive Strength, psi	45,000	32,000
Flexural Strength, psi	13,000	14,000
Dielectric Strength, v/mil	730	380
Loss Factor at 1 MHz	.009	.012
Dielectric Constant at 1 MHz	6.7	6.8
Thermal Conductivity, BTUx in/hrxft ² x°F (W/mx°K)	6.02 (.87)	4.08 (.59)

750°F/400°C Glass-Ceramic

Part Number	Type	Size (inches)	
MC-GC-P-L-1/4-4-6	Plate	¼ x 4 x 6	
MC-GC-P-L-1/4-14-20	Plate	¼ x 14 x 20	
MC-GC-P-L-3/8-4-6	Plate	3/8 x 4 x 6	
MC-GC-P-L-3/8-14-20	Plate	3/8 x 14 x 20	
MC-GC-P-L-1/2-4-6	Plate	½ x 4 x 6	
MC-GC-P-L-1/2-14-20	Plate	½ x 14 x 20	
MC-GC-P-L-3/4-4-6	Plate	¾ x 4 x 6	
MC-GC-P-L-3/4-14-20	Plate	¾ x 14 x 20	
MC-GC-P-L-1-4-6	Plate	1 x 4 x 6	
MC-GC-P-L-1-14-20	Plate	1 x 14 x 20	
MC-GC-R-L-1/4-12	Rod	¼ x 12	
MC-GC-R-L-1/2-12	Rod	½ x 12	
MC-GC-R-L-3/4-12	Rod	¾ x 12	
MC-GC-R-L-1-12	Rod	1 x 12	

1100°F / 593°C Glass-Ceramic

Part Number	Type	Size (inches)	
MC-GC-P-H-1/4-4-6	Plate	¼ x 4 x 6	
MC-GC-P-H-1/4-14-20	Plate	¼ x 14 x 20	
MC-GC-P-H-3/8-4-6	Plate	3/8 x 4 x 6	
MC-GC-P-H-3/8-14-20	Plate	3/8 x 14 x 20	
MC-GC-P-H-1/2-4-6	Plate	½ x 4 x 6	
MC-GC-P-H-1/2-14-20	Plate	½ x 14 x 20	
MC-GC-P-H-3/4-4-6	Plate	¾ x 4 x 6	
MC-GC-P-H-3/4-14-20	Plate	¾ x 14 x 20	
MC-GC-P-H-1-4-6	Plate	1 x 4 x 6	
MC-GC-P-H-1-14-20	Plate	1 x 14 x 20	
MC-GC-R-H-1/4-12	Rod	¼ x 12	
MC-GC-R-H-1/2-12	Rod	½ x 12	
MC-GC-R-H-3/4-12	Rod	¾ x 12	
MC-GC-R-H-1-12	Rod	1 x 12	

CerMax™ Dense Machinable Unfired Aluminum Silicate



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750°F/400°C Glass-Ceramic			
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MC-AS-P-L-1/4-4-6	Plate	¼ x 4 x 6	
MC-AS-P-L-1/4-14-20	Plate	¼ x 14 x 20	
MC-AS-P-L-3/8-4-6	Plate	3/8 x 4 x 6	
MC-AS-P-L-3/8-14-20	Plate	3/8 x 14 x 20	
MC-AS-P-L-1/2-4-6	Plate	½ x 4 x 6	
MC-AS-P-L-1/2-14-20	Plate	½ x 14 x 20	
MC-AS-P-L-3/4-4-6	Plate	¾ x 4 x 6	
MC-AS-P-L-3/4-14-20	Plate	¾ x 14 x 20	
MC-AS-P-L-1-4-6	Plate	1 x 4 x 6	
MC-AS-P-L-1-14-20	Plate	1 x 14 x 20	
MC-AS-R-L-1/4-12	Rod	¼ x 12	
MC-AS-R-L-1/2-12	Rod	½ x 12	
MC-AS-R-L-3/4-12	Rod	¾ x 12	
MC-AS-R-L-1-12	Rod	1 x 12	