

M Cubed Technologies ASC-701 Aluminum alloy-70% SiC Metal Matrix Composite

Category : Ceramic , Carbide , Metal , Metal Matrix Composite

Material Notes:

High stiffness, low density, low CTE composite. Components can be formed with complicated features, and can be machined to tight tolerances. Applications in high-precision equipment--semiconductor, automotive, aerospace. Information provided by M Cubed Technologies, Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_M-Cubed-Technologies-ASC-701-Aluminum-alloy-70-SiC-Metal-Matrix-Composite.php

Physical Properties	Metric	English	Comments
Density	3.01 g/cc	0.109 lb/in ³	ASTM C135

Mechanical Properties	Metric	English	Comments
Tensile Strength, Ultimate	230 MPa	33400 psi	ASTM E8
Modulus of Elasticity	270 GPa	39200 ksi	ASTM E494
Flexural Strength	230 MPa	33400 psi	ASTM C1161
Poissons Ratio	0.22	0.22	ASTM E494
Fracture Toughness	10.0 MPa-m ^{1/2}	9.10 ksi-in ^{1/2}	ASTM C1421
Shear Modulus	111 GPa	16100 ksi	Calculated

Thermal Properties	Metric	English	Comments
CTE, linear	6.20 μm/m-°C	3.44 μin/in-°F	ASTM E831
	@Temperature 25.0 - 100 °C	@Temperature 77.0 - 212 °F	
Thermal Conductivity	170 W/m-K	1180 BTU-in/hr-ft ² -°F	ASTM E1461

Descriptive Properties	Value	Comments
Matrix	Al Alloy	
Particle Reinforcement	SiC	
Vol. % Reinforcement	70	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China