

M Cubed Technologies ASC-301 Aluminum alloy-30% SiC Metal Matrix Composite

Category : Metal , Metal Matrix Composite

Material Notes:

High stiffness, low density composite. Parts are cast using several standard foundry techniques Size range varies from small components (1lb or smaller) to parts greater than 10 ft. square with complicated features, 1000-2000 lbs+. Applications in high-precision equipment: semiconductor, CMM, automotive, aerospace, and also in ballistic protection. Information provided by M Cubed Technologies, Inc.

Order this product through the following link:

http://www.lookpolymers.com/polymer_M-Cubed-Technologies-ASC-301-Aluminum-alloy-30-SiC-Metal-Matrix-Composite.php

Physical Properties	Metric	English	Comments
Density	2.78 g/cc	0.100 lb/in ³	ASTM C135

Mechanical Properties	Metric	English	Comments
Knoop Microhardness	160	160	kg/mm ² ; ASTM C1326
	@Load 2.00 kg	@Load 4.41 lb	
Tensile Strength, Ultimate	370 MPa	53700 psi	ASTM E8
Modulus of Elasticity	125 GPa	18100 ksi	ASTM E494
Flexural Strength	510 MPa	74000 psi	ASTM C1161
Poissons Ratio	0.29	0.29	ASTM E494
Fracture Toughness	15.0 MPa-m ^{1/2}	13.7 ksi-in ^{1/2}	ASTM C1421
Shear Modulus	48.4 GPa	7020 ksi	Calculated

Thermal Properties	Metric	English	Comments
CTE, linear	15.6 µm/m-°C	8.67 µin/in-°F	ASTM E831
	@Temperature 25.0 - 100 °C	@Temperature 77.0 - 212 °F	
Thermal Conductivity	150 W/m-K	1040 BTU-in/hr-ft ² -°F	ASTM E1461

Descriptive Properties	Value	Comments
Matrix	Al Alloy	
Particle Reinforcement	SiC	
Vol. % Reinforcement	30	

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