

Rogers Corporation R03010 Ceramic-Filled PTFE Composite, High Frequency Circuit Material

Category : Polymer , Thermoplastic , Fluoropolymer , PTFE , Polytetrafluoroethylene (PTFE), Glass Filled, Molded

Material Notes:

Features and Benefits:

Order this product through the following link:

http://www.lookpolymers.com/polymer_Rogers-Corporation-R03010-Ceramic-Filled-PTFE-Composite-High-Frequency-Circuit-Material.php

Physical Properties	Metric	English	Comments
Density	2.80 g/cc	0.101 lb/in ³	
Water Absorption	<= 0.10 %	<= 0.10 %	D24/23; IPC-TM-2.4.8

Mechanical Properties	Metric	English	Comments
Tensile Modulus	1.50 GPa	218 ksi	X, Y-Direction; ASTM D638
Peel Strength	1.65 kN/m	9.40 pli	Copper; 1/2 oz. EDC After Solder Float; IPC-TM-650 2.4.8

Thermal Properties	Metric	English	Comments
CTE, linear	11.0 µm/m-°C	6.11 µin/in-°F	Y-Direction; ASTM D3386-94
	@Temperature -55.0 - 288 °C	@Temperature -67.0 - 550 °F	
	13.0 µm/m-°C	7.22 µin/in-°F	X-Direction; ASTM D3386-94
	@Temperature -55.0 - 288 °C	@Temperature -67.0 - 550 °F	
	16.0 µm/m-°C	8.89 µin/in-°F	Z-Direction; ASTM D3386-94
	@Temperature -55.0 - 288 °C	@Temperature -67.0 - 550 °F	
Specific Heat Capacity	0.800 J/g-°C	0.191 BTU/lb-°F	Calculated
Thermal Conductivity	0.950 W/m-K	6.59 BTU-in/hr-ft ² -°F	Z Direction; ASTM C518
	@Temperature 80.0 °C	@Temperature 176 °F	
Decomposition Temperature	500 °C	932 °F	TGA; ASTM D3850
Flammability, UL94	V-0	V-0	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+11 ohm-cm	1.00e+11 ohm-cm	Cond. A; IPC 2.5.17.1

Surface Resistance Electrical Properties	1.00e+11 ohm Metric	1.00e+11 ohm English	Cond. A: IPC 2.5.17.1 Comments
Dielectric Constant	9.9 - 10.5	9.9 - 10.5	Clamped stripline, Z-direction; IPC-TM-650 2.5.5.5
	@Frequency 1.00e+10 Hz	@Frequency 1.00e+10 Hz	
	11.2	11.2	Differential Phase Length Method, Z-Direction
	@Frequency 8.00e+9 - 4.00e+10 Hz	@Frequency 8.00e+9 - 4.00e+10 Hz	
Dissipation Factor	0.0022	0.0022	IPC-TM-650 2.5.5.5
	@Frequency 1.00e+10 Hz	@Frequency 1.00e+10 Hz	

Descriptive Properties	Value	Comments
Dimensional Stability	0.5 mm/m	ASTM D257, Cond. A; X, Y-direction
Thermal Coefficient of Dielectric Constant	-280 ppm/°C	IPC-TM-650 2.5.5.5; 10 GHz; 0°C to 100°C; Z-Direction

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