Rogers Corporation RO3035 Ceramic-Filled PTFE Composite, High Frequency Circuit Material

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

Material Notes:

Features and Benefits:Low dielectric lossExcellent mechanical properties versus temperature - reliable stripline and multi-layer board constructions.Uniform mechanical properties- ideal for multi-layer board designs with a range of dielectric constants and suitable for use with epoxy glass multi-layer board hybrid designs.Low in-plane expansion coefficient (match to copper) - allows for more reliable surface mounted assemblies, ideal for applications sensitive to temperature change and excellent dimensional stabilityStable dielectric constant versus temperature and frequency - Ideal for band pass filters, microstrip patch antennas and voltage controlled oscillatorsHigh thermal conductivity - Lower operating temperature and increased reliability in power amplifier applicationsLead-free process compatibleUses:Commercial microwave applicationsRF applicationsInformation provided by Rogers Corporation.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Rogers-Corporation-RO3035-Ceramic-Filled-PTFE-Composite-High-Frequency-Circuit-Material.php

Physical Properties	Metric	English	Comments
Density	2.10 g/cc	0.0759 lb/in³	
Water Absorption	<= 0.10 %	<= 0.10 %	D24/23; IPC-TM-650 2.6.2.1
Thickness	127 - 1520 microns	5.00 - 60.0 mil	Range of Thicknesses Available

Mechanical Properties	Metric	English	Comments
Peel Strength	1.79 kN/m @Temperature 288 °C, Time 10.0 sec	10.2 pli @Temperature 550 °F, Time 0.00278 hour	Copper, After Solder Float; IPC-TM-650 2.4.8

Thermal Properties	Metric	English	Comments
CTE, linear	17.0 µm/m-°C @Temperature -55.0 - 288 °C	9.44 µin/in-°F @Temperature -67.0 - 550 °F	X, Y- Direction; IPC-TM-650 2.4.41
	24.0 µm/m-°C @Temperature -55.0 - 288 °C	13.3 µin/in-°F @Temperature -67.0 - 550 °F	Z-Direction; IPC-TM-650 2.4.41
Specific Heat Capacity	0.930 J/g-°C	0.222 BTU/lb-°F	Calculated
Thermal Conductivity	0.500 W/m-K @Temperature 80.0 °C	3.47 BTU-in/hr-ft²-°F @Temperature 176 °F	ASTM C518
Flammability, UL94	V-0	V-0	

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	Cond. A; IPC 2.5.17.1
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	Cond. A; IPC 2.5.17.1
Dielectric Constant	3.45 - 3.55 @Frequency 1.00e+10 Hz	3.45 - 3.55 @Frequency 1.00e+10 Hz	Process, Clamped Stripline; IPC-TM-650 2.5.5.5
	3.6 @Frequency 8.00e+9 - 4.00e+10 Hz	3.6 @Frequency 8.00e+9 - 4.00e+10 Hz	Design; Differential Phase Length Method
Dissipation Factor	0.0017 @Frequency 1.00e+10 Hz	0.0017 @Frequency 1.00e+10 Hz	IPC-TM-650 2.5.5.5

Descriptive Properties	Value	Comments
Thermal Coefficient of Dielectric Constant	-11 ppm/°C	IPC-TM-650 2.5.5.5; 10°C to 150°C; Z-Direction
	-34 ppm/°C	IPC-TM-650 2.5.5.5; -50°C to 10°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