

## Park Electrochemical Nelco® NH9300 PTFE Laminate, Woven-Glass and Ceramic Reinforced

Category : Polymer , Thermoplastic , Fluoropolymer , PTFE

### Material Notes:

The N9000 PTFE laminate system is designed for critical microwave components, antennas, power amplifiers and subassemblies. Superior mechanical and electrical performance make the N9000 PTFE laminate system the material of choice for lowest loss, high frequency applications. Key Features and Benefits: Complete spectrum of controlled dielectric constants Enhanced N9000 IM materials available Consistent Quality Optimized N9000 PTFE processing Applications/Qualifications: Cellular Base Station Antennas Wireless Communications Power Amplifiers Dual Band Hi Power Passive Circuits Automotive Applications Digital/Microwave Hybrid Multilayer PCB Assemblies Millimeter Wave Components Telecommunications Information provided by Park Electrochemical Corp.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Park-Electrochemical-Nelco-NH9300-PTFE-Laminate-Woven-Glass-and-Ceramic-Reinforced.php](http://www.lookpolymers.com/polymer_Park-Electrochemical-Nelco-NH9300-PTFE-Laminate-Woven-Glass-and-Ceramic-Reinforced.php)

Physical Properties	Metric	English	Comments
Specific Gravity	2.459 g/cc	2.459 g/cc	ASTM D792A
Water Absorption	<= 0.080 %	<= 0.080 %	IPC-TM-650.2.6.2.1

Mechanical Properties	Metric	English	Comments
Flexural Strength	131 MPa	19000 psi	Crosswise; IPC-TM-650.2.4.4
	158.6 MPa	23000 psi	Lengthwise; IPC-TM-650.2.4.4
Peel Strength	2.312 kN/m	13.19 pli	after thermal shock (30 sec. at 260°C); IPC-TM-650.2.4.8
	2.33 kN/m	13.3 pli	18, 35, and 70µm copper; IPC-TM-650.2.4.8

Thermal Properties	Metric	English	Comments
CTE, linear	9.00 µm/m-°C	5.00 µin/in-°F	X; IPC-TM-650.2.4.41
	12.0 µm/m-°C	6.67 µin/in-°F	Y; IPC-TM-650.2.4.41
	71.06 µm/m-°C	39.48 µin/in-°F	Z; IPC-TM-650.2.4.41
Thermal Conductivity	0.231 W/m-K	1.60 BTU-in/hr-ft²-°F	ASTM E1225
Flammability, UL94	V-0	V-0	IPC-TM-650.2.3.10

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+14 ohm-cm	1.00e+14 ohm-cm	IPC-TM-650.2.5.17
Surface Resistance	1.00e+13 ohm	1.00e+13 ohm	IPC-TM-650.2.5.17

Electrical Properties	Metric	English	Comments
Dielectric Constant	@Frequency 1.00e+10 Hz	@Frequency 1.00e+10 Hz	IPC-TM-650.2.5.5.5
Dielectric Breakdown	45000 V	45000 V	IPC-TM-650.2.5.6
Dissipation Factor	0.0023 @Frequency 1.00e+10 Hz	0.0023 @Frequency 1.00e+10 Hz	IPC-TM-650.2.5.5.5
Arc Resistance	180 sec	180 sec	ASTM D495

Descriptive Properties	Value	Comments
Passive Intermodulation Formulation Availability	Yes	
Passive Intermodulation Performance (dBc)	-155	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

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