Arlon® 35NQ

Thermoplastic Polyimide

Arlon-MED

Message:

35NQ is a pure polyimide laminate and prepreg system. Reinforced with woven Quartz fabric, combining the advantages of a reduced cure cycle, high temperature polyimide system (Tg >/=250°C), with low dielectric constant and loss tangent (DK = 3.5, loss 0.009 at 1 MHz) for applications requiring operation at RF/Microwave frequencies. Polyimide Quartz materials also exhibit reduced in-plane CTE for expansion matched SMT applications.

General Information			
Filler / Reinforcement	Quartz Fabric		
Features	Fast Molding Cycle High Heat Resistance Low (to None) Lead Content		
Uses	Aerospace Applications Electrical/Electronic Applications Laminates		
RoHS Compliance	RoHS Compliant		
Forms	Sheet		
Physical	**Nominal Value**	**Unit**	**Test Method**
Water Absorption (24 hr)	0.25	%	Internal Method
Decomposition Temperature			Internal Method
5%	407	°C	
Intial	363	°C	
Peel Strength			Internal Method
-- [1]	1.1	kN/m	
-- [2]	> 1.1	kN/m	
-- [3]	1.1	kN/m	
Expansion Rate (50 to 260°C) [4]	1.1	%	Internal Method
T260	> 1.0	hr	Internal Method
T288	> 1.0	hr	Internal Method
T300	11.0	min	Internal Method
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	20700	MPa	Internal Method
Flexural Strength	655	MPa	Internal Method
Poisson's Ratio [5]	0.15		ASTM D3039
Thermal	**Nominal Value**	**Unit**	**Test Method**
Glass Transition Temperature	> 250	°C	Internal Method
CLTE - Flow			
-- [6]	9.0E-6 to 1.0E-5	cm/cm/°C	Internal Method

< 250°C [7]	5.0E-5	cm/cm/°C	Internal Method
> 250°C [8]	1.5E-4	cm/cm/°C	Internal Method
Thermal Conductivity (100°C)	0.20	W/m/K	ASTM E1461
Electrical	**Nominal Value**	**Unit**	**Test Method**
Surface Resistivity [9]	8.0E+15	ohms	Internal Method
Volume Resistivity [10]	5.0E+15	ohms·cm	Internal Method
Dielectric Strength	40	kV/mm	Internal Method
Dielectric Constant (1 MHz)	3.50		Internal Method
Dissipation Factor (1 MHz)	9.0E-3		Internal Method
Arc Resistance	165	sec	Internal Method
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating	V-1		UL 94
NOTE			
1.	After Thermal Stress		
2.	At Elevated Temperatures		
3.	After Process Solutions		
4.	Z-Axis		
5.	x and y direction		
6.	Y-axis		
7.	Z-axis		
8.	Z-axis		
9.	C96/35/90		
10.	C96/35/90		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China