

Low Loss & Halogen-free & Excellent Thermal Resistance

NY-A5HF/NY-A5HFP

特点 FEATURES:

- 低介电常数和低介电常数 (Low Dk 4.20@10GHz and Low Df 0.0070@10GHz)
- 高TG无卤无铅兼容 High TG Halogen-free and Lead-free compatible
- 低Z轴膨胀系数 (1.1%) 及优异通孔可靠性 Low Z-axis CTE(1.1%),offering superior PTH reliability

应用领域 APPLICATIONS:

- 汽车电子 Automobile electronics
- HDI Sip

NY-A5HF基板典型性能 Typical Properties for NY-A5HF Laminate

属性 Property	项目 Item		测试方法 IPC-TM-650	测试条件 Test Condition	单位 Unit	典型值 Typical Value
热性能 Thermal	玻璃态转换温度 Tg		2.4.25	DSC	℃	/
			2.4.24	TMA	℃	230
			2.4.24.4	DMA	℃	260
	X/Y轴热膨胀系数CTE,X/Y-axis		2.4.24.5	< Tg,TMA	PPM/℃	9-11
	Z轴热膨胀系数 Z-axis Expansion		2.4.24	< Tg,TMA	PPM/℃	30
				> Tg,TMA	PPM/℃	90
			2.4.24	50~260℃	%	1.1
	热裂解温度 Td		2.4.24.6	TGA(5%W.L)	℃	405
	耐热性 T288		2.4.24.1	Clad	Min	> 60
Etched				Min	> 60	
电性能 Electrical	介电常数 DK (R/C:55%/70%)	1MHz	2.5.5.9	C-24/23/50	-	/
		1GHz				
		10GHz	SPDR method			
	介质损耗 Df (R/C:55%/70%)	1MHz	2.5.5.9	C-24/23/50	-	/
		1GHz				
		10GHz	SPDR method			
	体积电阻 Volume Resistivity		2.5.17.1	C-96/35/90	MΩ-cm	2.3×10 ⁹
	表面电阻 Surface Resistivity				MΩ	1.2×10 ⁸
物理性能 Physical	吸水率 Water Absorption		2.6.2.1	E-1/105+D-24/23	%	0.12
	剥离强度 Peel Strength (HTE)	1oz	2.4.8	As Received	N/mm	0.85
	剥离强度 Peel Strength (RTF)	1oz				0.7
	剥离强度 Peel Strength (HVLP)	1oz				\
	弯曲强度 Flexural Strength	Warp	2.4.4	As Received	N/mm2	510
		Fill				460
	耐燃性 Flame Resistance		UL-94	A&E-4/125	-	V-0