



Superior Dk/Df, Lead Free & Halogen Free EM-370(D) / EM-37B(D)

- Standard FR-4 Dk and lower Df
- Tg 175°C, Td 385°C and T288 > 60minutes (clad)
- Z-axis CTE 2.2% (50~260°C)
- Low moisture absorption and excellent CAF resistance
- Halogen, antimony and red phosphorus free
- For high performance server, network and telecom application

Basic Laminate Property

Item		IPC-TM-650	Test Condition	Unit	Typical Value
Glass Transition Temp.		2.4.25	DSC	°C	175
		2.4.24.3	TMA	°C	170
		2.4.24.2	DMA	°C	195
CTE, X-, Y-axis		2.4.24	Pre-Tg, TMA	ppm/°C	12/15
CTE, Z-axis		2.4.24	Alpha 1, TMA	ppm/°C	40
			Alpha 2, TMA	ppm/°C	200
Z-axis Expansion		2.4.24	50~260°C, TMA	%	2.2
Decomposition Temp.		2.4.24.6	TGA	°C	385
Thermal Stress 10sec 288°C		2.4.13.1	Clad	—	Pass Visual
			Etched	—	Pass Visual
Water Absorption		2.6.2.1	E-1/105 + D-24/23	%	0.10
Peel Strength (HTE)	0.5oz	2.4.8	As Received	lb/in	5
			After Thermal Stress	lb/in	5
	1.0oz		As Received	lb/in	6
			After Thermal Stress	lb/in	6
Peel Strength (RTF)	0.5oz	2.4.8	As Received	lb/in	4
			After Thermal Stress	lb/in	4
	1.0oz		As Received	lb/in	4.5
			After Thermal Stress	lb/in	4.5
Permittivity (RC 50%)	1GHz	2.5.5.9	C-24/23/50	—	4.1
	10GHz	Cavity Resonator		—	4.0
Loss tangent (RC 50%)	1GHz	2.5.5.9	C-24/23/50	—	0.011
	10GHz	Cavity Resonator		—	0.015
Volume Resistivity		2.5.17.1	C-96/35/90	MΩ-cm	>10 ¹⁰
Surface Resistivity		2.5.17.1	C-96/35/90	MΩ	>10 ⁹
Flexural Strength	Warp	2.4.4	as received	MPa	460~500
	Fill		as received	MPa	420~440
Flame Resistance		UL-94	A&E-24/125	—	V-0