Low Dk, Middle Tg & Halogen Free

EM-355(D) / EM-355B(D)

- Low Dk for Impedance control
- Superior thermal resistance for lead-free process
- Low moisture absorption
- Similar to FR-4 PCB Processing

Basic Laminate Property

Item		IPC-TM-650	Test Condition	Unit	Typical Value
Glass Transition Temp.		2.4.25	DSC	℃	153
CTE, X-, Y-axis		2.4.24	Pre-Tg, TMA	ppm/℃	12/15
CTE, Z-axis		2.4.24	Alpha 1, TMA	ppm/℃	40
			Alpha 2, TMA	ppm/℃	225
Z-axis Expansion		2.4.24	50~260℃, TMA	%	2.90
Decomposition Temp.		2.4.24.6	TGA	℃	390
Thermal Stress 10sec 288℃		2.4.13.1	Clad	—	Pass Visual
			Etched	—	Pass Visual
Water Absorption		2.6.2.1	E-1/105 + D-24/23	%	0.09
Peel Strength	H oz	2.4.8	As Received	lb/in	7.0
			After Thermal Stress	lb/in	7.0
Permittivity (RC 75%)	2 GHz	Cavity Resonator	C-24/23/50		3.33
Loss Tangent (RC 75%)	2GHz	Cavity Resonator	C-24/23/50	—	0.013
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	500~540
	Fill		As Received	MPa	400~440
Flame Resistance		UL-94	A & E-24/125	—	V-0