

EM-A70K

Radio Frequency /Extreme-low Loss / Halogen Free

- Applications Include: Base Station and Satellite Antenna, Automotive Radar
- Glass-Reinforced with Excellent Stability over Frequency and Temperature
- Extreme-Low Transmission Loss Performance
- RoHS Compliant
- UL File: E150504
- Applicable IPC Slash Sheets: IPC-4103 /240

Basic Laminate Property

Property	Item		Typical Value	Unit	Test Condition	IPC-TM-650
Thermal	Tg		N/A	°C	DSC	2.4.25
			170	°C	TMA	2.4.24
			200	°C	DMA	2.4.24.4
	CTE, X/Y-axis (5 mil)		19/21	ppm/°C	< Tg, TMA	2.4.24.5
	CTE, Z-axis		35~40	ppm/°C	< Tg, TMA	2.4.24
			140~160	ppm/°C	> Tg, TMA	
	Z-axis Expansion		1.8	%	50~260 °C	2.4.24
	Td		360	°C	TGA (5% W.L)	2.4.24.6
	T288		>120	Min	Clad	2.4.24.1
			>120	Min	Etched	
	Thermal Conductivity		0.45	W/m·K	-	ASTM D5470
Electrical	Dk (5 mil)	10 GHz	3.1	-	C-24/23/50	2.5.5.13
	Df (5 mil)	10 GHz	0.0018			2.5.5.13
	Volume Resistivity		>10 ¹⁰	MΩ-cm	C-96/35/90	2.5.17.1
	Surface Resistivity		>10 ⁹	MΩ	C-96/35/90	2.5.17.1
Physical	Water Absorption		0.13	%	E-1/105+D-24/23	2.6.2.1
	Peel Strength	HVLP3 1 oz	4.5	lb/in	As Received	2.4.8
		HVLP3 H oz	3.5			
	Flame Resistance		V-0	-	C-48/23/50	UL-94

Above typical values are tested under specified constructions and not intended for specification.