FARADFLEX®

Embedded Capacitor Material Characteristic Data

Properties	Method						
	IPC or others	BC24	BC16	BC12	BC8	BC12TM	BC16T
Dielectric Thickness, µm	Reference	24	16	12	8	12	16
Cp@ 1MHz/1 GHz (pF/cm^2)	IPC TM-650 2.5.5.3	**180/160**	**250/225**	**300/270**	**480/430**	**700/600**	**1700/1450**
Dk @1Mhz/1 GHz	IPC TM-650 2.5.5.3	4.4/4.0	4.4/4.0	4.4/4.0	4.4/4.0	10/8.5	30/26
Loss Tangent @ 1 MHz/1 GHz	IPC TM-650 2.5.5.3	0.015/0.02	0.015/0.02	0.015/0.02	0.016/.021	0.019/0.03	0.019/0.035
Peel Strength, lbs/in	IPC TM-650 2.4.9	>8	>8	>8	>8	>4	>6
Dielectric Strength, kV/mil	IPC TM-650 2.5.6.3	7.0+	7.0+	7.0+	7.0+	5.8	2.8
Tensile Strength, Mpa (kpsi)	ASTM D-882A	152(22.0)	164(23.8)	194(28.2)	126(18.3)	110(16.0)	NA
Elongation, %	ASTM D-882A	18.5	16.5	11.5	8.5	6.0	NA
Decomposition Temp. 5% weight loss in N_2 / 0_2	TGA	390/350	385/345	385/345	380/340	390/345	390/350
Boil test, 2hrs Boil in water, 20 sec dip @260C solder (10spec)	-	Pass	Pass	Pass	Pass	Pass	Pass
Thermal Stress (20Sec Float @288C), Times	-	>10	>10	>10	>10	>10	>10
Migration, 85C/85%RH/DC 35V	-	>1000	>1000	>1000	>1000	>1000	>1000
Flammability/Temp Rating	UL-94/ UL746	V0 130ºC	V0 130ºC	V0 130ºC	V0 125ºC	V0 130C	V0 130 C
PWB Processing	-	Both side etching	Both side etching	Both side etching	Both side etching	Both side etching	Sequential Lamination

NA=Not Applicable