

MGRZ-848

For 2-8 Layer Rigid Board, 3C Electronics Tg 135°C

Item		Test method	Test condition	Unit	Laminate	
		IPC-TM-650			IPC Spec.	Typical Value
Glass transition temp.		2.4.25	DSC	°C	Min. 110	135
CTE, X-, Y-axis		2.4.24	Pre-Tg, TMA	ppm/°C	—	14/17
CTE, Z-axis		2.4.24	Alpha 1, TMA	ppm/°C	—	53
			Alpha 2, TMA	ppm/°C	—	290
Z-axis expansion		2.4.24	50~260°C, TMA	%	—	4.22
Decomposition temp.		2.4.24.26	TGA	°C	—	312
Thermal resistance (Copper removed)		2.4.24.1	T260	minutes	—	19
			T288	minutes	—	2
Water absorption		2.6.2.1	E-1/105+D-24/23	%	Max. 0.8	0.16
Peel strength	1 OZ	2.4.8	As received	lb/in	Min. 6	12
			After thermal stress	lb/in	Min. 6	12
Permittivity (RC 50%)	1 MHz	2.5.5.9	C-24/23/50	—	Max. 5.4	4.6
	1 GHz			—		4.3
Loss tangent (RC 50%)	1 MHz	2.5.5.9	C-24/23/50	—	Max. 0.035	0.016
	1 GHz			—		0.018
Flame resistance		UL-94	A&E-24/125	—	Min. V-0	V-0