

Copper Clad basic material ILM-R1

Technical Units

Characteristics	Value	Unit
1. Flammability	UL -94 VO	
2. Glass transition temperature of dielectric layer (T _g) DSC	°C	> 140 °
3. Adhesion of copper foil		
A) Heat shock (288°C, 10 Sec.)	N/mm	1,37
B) at 125 ° C	N/mm	0,96
4. Volume resistivity		
A) moisture resistance	MΩ	1,0 x 10 ⁶
B) high temperature E-24/125	MΩ	1,0 x 10 ⁵
5. Surface resistance		
A) moisture resistance	MΩ	1,0 x 10 ⁶
B) high temperature E-24/125	MΩ	1,0 x 10 ⁵
6. Water absorption D-24/23	%	0,2
7. Dielectric strength D48/50+D-0,5/23	kV	55
8. Permittivity 1 Mhz C-24/23/50	Er	4,5
9. Dissipation factor C-24/23/50 tan		0,021
10. Bending strength		
A) longitudinal direction	n/mm ²	550
B) transverse direction	n/mm ²	435
11. Arc resistance minimum D48/50+D-0.5/23		> 80
12. Heat shock 10 Sec. bei 288°C		
A) unetched		pass
B) etched		pass
13. Comparative Tracking Index (CTI) IEC60112		175
14. Dimensional stability	ppm/K	156
	ppm/K	121
15. Decomposition temperature 10°/min, N 5% wt. loss	Td	315 ° C
16. Thermal resistance	T 288	120 sec.
17. Expansion (CTE)		
A) z-axse below T _g / above T _g	TMA	65/270
B) x-axse	%	4,6

(All values are nominal values and are for reference only)



Delivery Forms

Laminat thickness in mm <small>(further material bearing on strengths Inquiry)</small>	0,8	1,0	1,2	1,5	2,0	3,0	3,2
Copper clad (in μm) one side copper double-side copper <small>(other Cu-bearing laminates on Inquiry)</small>	18/0, 35/0, 70/0 18/18, 35/35, 70/70						
Sizes	various panel sizes for ex.: 940 x 1245mm 1090 x 1245mm			or customized cut to size panels on request			
Standard size tolerance size to 300mm size from 300mm	+/- 0,5mm +/- 0,8mm						
Special tolerance	according to the customer						
Edges	deburred / chamfered, also with rounded edges						

Our technical datas are collected according to best knowledge and with a highest degree on accuracy, but are not binding and without any acceptance of liability. Our customers are responsible for testing of the conditions of the goods and ability for the own production, procedure and application of the designed products

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