

IMS-T core material Polytherm TC-Lam 1.3

Core material:	Polytherm TC-Lam 1.3
Manufacturer:	MSC Polymer AG
Thickness Dielectric:	100µm
Protective film:	HT (High Temperature ≤ 280 °C)

Material characteristic (1,5mm/100µm/35µm Cu)	Test Standard/-term	Unit	Spec.	Typical Values
Thermal load 288 °C, dip test, no delamination	TM 650-2.4.13.1	sec	≤10	90
Copper adhesion	TM 650-2.4.8 / A 288 °C, 10 s	N/mm N/mm		1.85 1.87
Dielectric strength	TM 650-2.6.2 / A	kV		3
Electric strength	TM 650 / A	kV/mm		30
Heat conduction Dielectric	A	W/m*K		1.3
Heat resistance Dielectric	SJ20780 / A	K/W	≤1.50	1.20
Surface insulation resistance	TM 650-2.5.17.1 / E24/125	MΩ	10 ³	10 ⁷
	C96/35/90	MΩ	10 ⁴	10 ⁷
Volume resistance	TM 650-2.5.17.1 / E24/125	MΩ -cm	6*10 ⁴	10 ⁵
	C96/35/90	MΩ -cm	6*10 ⁴	10 ⁷
Flammable	UL-94	Klasse	V-0	V-0
Comparative tracking resistance (CTI)	UL746A	V	PLC 0	PLC 0
Water absorption	TM 650-2.6.2.1 / D-24/23	%	≤ 0.5	0.1
Glass transition temperature (Tg)	A	°C	---	100

Thickness tolerance dielectric: IPC-4101B grade B/L

Source: MSC-POLYMER AG