

Aluminum Based CCL Material for PCB

Test item	Method	Condition	Unit	ALC-1331	ALC-1371
Thermal conductivity	Laser flash	A	W/mK	3.0	7.0
	Hot wire			2.5	-
Breakdown voltage DC	25mm ϕ pattern	A	kV	>10	>10
		E-1000/125		>10	-
Breakdown voltage AC	25mm ϕ pattern	A	kV	5.0	5.0
		E-1000/125		5.0	-
Tracking resistance	IEC	A	V	600	¥600
Glass transition temperature	TMA	10°C/min	°C	100	130
	DMA	5°C/min		96	130
	DSC	20°C/min		100	-
Solder heat resistance		288°C dip 30"	-	No remarkable change	No remarkable change
		300°C float 120"		No remarkable change	No remarkable change
Peel strength	35umCF	A	N/mm	1.5	1.7
		E-1000/125		1.4	-
Dielectric constant	1MHz	C-96/20/65	-	7.2	7.6
		C-96/20/65+D-24/23		7.7	7.8
Dissipation factor	1MHz	C-96/20/65	-	0.014	0.010
		C-96/20/65+D-24/23		0.025	0.012
Volume resistivity		A	$\Omega \cdot \text{cm}$	3.5E+15	1.2E+16
		C-96/40/90		6.6E+13	2.7E+14
Surface resistivity		A	Ω	2.1E+15	3.0E+15
		C-96/40/90		1.2E+14	2.6E+14
Water absorption		D-24/23	%	0.3	0.3
Flame resistance	UL-94V	-	-	V-0	V-0

*The data mentioned above is not guaranteed value but representative.