TCP - A18

Aluminum-Based Copper Clad Laminate 鋁基材銅箔基板

Purchasing Information 採購資訊

- **Copper foil 銅箔 :**
  0.5 ~ 6.0 oz / ft^2 (17 ~ 204 μm)

- **Thickness of dielectric 絕緣層厚度 :**
  2.0 ~ 10.0 mil (50 ~ 250 μm)

- **Aluminum base 鋁基材 :**
  Aluminum type 鋁型號 : 5052 / 6061 / 1050
  Thickness 厚度 : 0.8 / 1.0 / 1.5 / 2.0 / 3.0 mm
  With protective film on metal side 鋁表面有塑膠膜保護

- **Size 尺寸 (mm) :**
  460 x 610 , 510 x 610 , 540 x 610

※ Other panel size and thickness could be available upon request 其他尺寸及厚度可依客戶要求訂製.

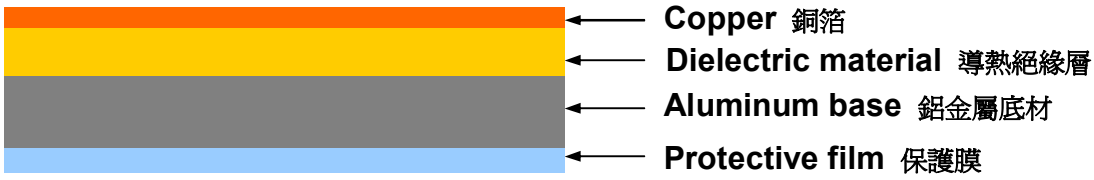
Features 特性

- **High thermal conductive 高熱傳導**
- **RoHS compliant 符合 RoHS 要求**
- **Halogen free material 無鹵材料**

Applications 應用

- **LED application 發光二極體之應用**
- **Converter 變壓器業**
- **Automotive 汽車業**
- **Audio 影視行業**

Construction 結構



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Typical Properties

	Test Items	Unit	Condition	Typical Value			Test Method
Physical	Dielectric layer thickness	mil(μm)	A	2.0 (50)	3.0 (75)	4.0 (100)	-----
	Peel strength, 1oz	1b/in	A	> 8	> 8	> 8	IPC-TM-650 2.4.8
	Moisture absorption	%	E-1/105+D-24/23	< 0.35	< 0.35	< 0.35	IPC-TM-650 2.6.2.1
	Dielectric breakdown strength	kV	C-24/25/65	> 3.0	> 3.0	> 3.0	IPC-TM-650 2.5.6
	Dielectric constant (1MHz)	---	C-24/25/65	4.6	4.6	4.6	IPC-TM-650 2.5.9
	Loss tangent	---	C-24/25/65	0.025	0.025	0.025	
	Volume resistivity	ohm-cm	C-96/25/65	$>1x10^{14}$	$> 1x10^{14}$	$> 1x10^{14}$	IPC-TM-650 2.5.17.1
	Surface resistivity	ohm	C-96/25/65	$>1x10^{11}$	$> 1x10^{11}$	$> 1x10^{11}$	
Thermal	Thermal conductivity	W/mK	A	2.0	2.0	2.0	ASTM D5470
	Solder resistance	sec.	288℃ solder dip	> 60	> 60	> 60	IPC-TM-650 2.4.13.1
	Glass transition temperature (Tg)	℃	DSC	120±5	120±5	120±5	IPC-TM-650 2.4.25
	CTE (Z axis)	ppm / ℃	< Tg	< 50	< 50	< 50	IPC-TM-650 2.4.24
			> Tg	< 180	< 180	< 180	
	Thermal resistance	Min.	TMA (288℃)	> 10	> 10	> 10	IPC-TM-650 2.4.24.1
	Decomposition	℃	TGA	> 340	> 340	> 340	IPC-TM-650 2.4.24.6
	Flammability	---	A	V-0	V-0	V-0	UL 94