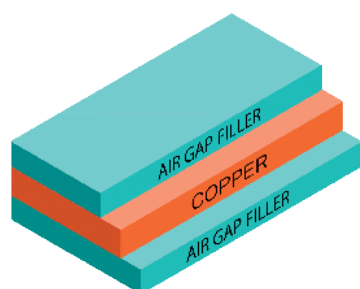


## COPPERFILLER

Data Sheet DS\_71 1/1

## STANDARD CONSTRUCTION



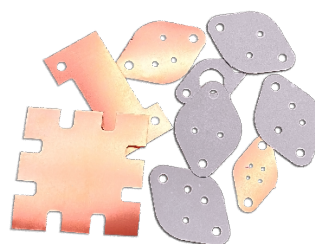
**Air gap filler  $\mu\text{m}$  (mils)**  
50(1.97)

**Copperfiller thickness  $\mu\text{m}$  (mils)**  
35(1.37) / 70 (2,76) / 105 (4,13)

**Air gap filler  $\mu\text{m}$  (mils)**  
50 (1.97)

## DESCRIPTION

- Aismalibar Copper Filler is an ultra-thin copper clad with One or two sides with Aismalibar Thermal air gap filler, a unique technology that provides air gap filling capacity when TIM arrives to 35-40°C
- Low mounting pressure
- Silicon free
- No need of thermal grease
- Glass free
- Ultra-low thermal resistance
- CTE expansion XY 17 ppm
- Ideal for pick and place automation
- Delivered in sheets of cut to size



UL Approved QMST2  
File: E47820  
IPC-4101



RoHS 3 / REACH  
Last updated compliance directive



Properties	50 $\mu\text{m}$	70 $\mu\text{m}$	105 $\mu\text{m}$	UNITS	TOLERANCE	TEST METHOD
Thermal conductivity	4 (0,102)	4 (0,102)	4 (0,102)	W/mK (W/inK)	+/- 15%	ASTM D5470
Thermal Resistance	0,039	0,039	0,039	K/W	+/- 15%	ASTM D5470
Thermal impedance @10/30/50 psi	0,333 (0,052)	0,333 (0,052)	0,333 (0,052)	Kcm <sup>2</sup> /W(Kin <sup>2</sup> /W)	+/- 15%	ASTM D5470
Nominal thickness (pressed)	135 (5,31)	170 (6,69)	205 ()	$\mu\text{m}$ (mils)	+/- 15 $\mu\text{m}$ (0,6mils)	-
Filler Type	Ceramic	Ceramic	Ceramic	-	-	-
Dielectric breakdown voltage, AC	$\geq 0,2$	$\geq 0,2$	$\geq 0,2$	kV	-	IPC TM 650 2.5.6.3
Density	2,6	2,6	2,6	g/cm <sup>3</sup>	+/- 10%	ASTM D792
Glass transition temperature of dielectric layer (by DSC)	35*	35*	35*	°C	-	IPC-TM 650-2.4.24
CTE (x,y)	17*	17*	17*	ppm/°C	-	IPC-TM 650-2.4.41

## STORAGE CONDITIONS

Keep storage climate conditions below 24°C and 55% relative humidity. In the event of storing under very low warehouse temperatures give some time for the packed TIM's to stabilize to room temperature before opening. Keeping the above mentioned storage conditions and avoiding TIM's damage by humidity uptake will give a useful life of 6 months after production date.

(\*) Value only of the Bond Sheet Cured

(\*\*) Thermal Conductivity and Impedance values may have a +/- 15% deviation.