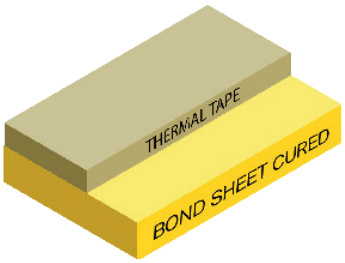
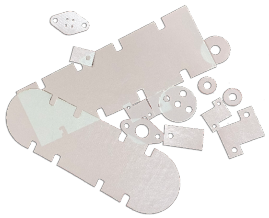
BOND SHEET CURED + THERMAL TAPE TT50

STANDARD CONSTRUCTION



Thermal tape µm (mils)
50 (1,97)

Bonsheet cured **µm (mils)**
70(2.8) / 100(3,9)



UL Approved QMTS2
File: E47820
IPC-4101

RoHS 3 / REACH
Last updated compliance directive

DESCRIPTION

- Ultra-thin dielectric layer, high dielectric strength, high thermal conductivity and low thermal resistance.
- Consisting of a glass fabric base, enriched with mineral fillers.
- Thermal conductivity of 2.2 W/mK with dielectric strengths greater than 4 KV (70 µm dielectric) or 6 KV (100 µm dielectric thickness).
- Low thermal resistance Rth of 0.315 (70µm), or 0.45 Kcm2/W (100µm), which efficiently dissipates the heat generated by the power components to the cooling elements.
- Silicon free.
- Ideal for pick and place automation
- One side or 2 sides of self-adhesive pressure sensitive adhesive tape TT50 with excellent wettability and conformability to aluminum ,copper and FR4 surfaces.

Properties	BSC70 1TT50	BSC100 1TT50	UNITS	TOLERANCE	TEST METHOD
Thermal conductivity	1,5 (0,038)	1,5 (0,038)	W/mK (W/inK)	+/- 15%	ASTM D5470
Thermal Resistance	0,090	0,107	K/W	+/- 15%	ASTM D5470
Thermal impedance @10/30/50 psi	0,77 (0,119)	0,92 (0,143)	Kcm^2/W (Kin^2/W)	+/- 15%	ASTM D5470
Nominal thickness (pressed)	120 (4,7)	150 (5,9)	µm (mils)	+/- 15µm (0,6mils)	-
Filler type	Ceramic	Ceramic	-	-	-
Dielectric breakdown voltage, AC	≥4	≥6	kV	-	IPC TM 650 2.5.6.3
Initial Tack (Peel adhesion)	4,3***	4,3	N/cm	-	ASTM D3330
Continuous Working Temperature	130*	130*	ºC	-	UL-MOT
Volume Resistivity (los tenemos H Tg)	1.82E+14*	1.82E+14*	Ohm-cm	-	ASTM D257
Surface Resistivity (los tenemos H Tg)	2.14E+13*	2.14E+13*	Ohm	-	ASTM D257
Decomposition Temperature (Td) Initial	205*	205*	ºC	-	IPC-TM 650-2.3.41
Decomposition Temperature (Td) 5% loss	327*	327*	ºC	-	IPC-TM 650-2.3.41
Glass transition temperature of dielectric layer (by DSC)	120*	120*	ºC	-	IPC-TM 650-2.4.24
Permitivity	6,7 (0,170)*	6,7 (0,170)*	pF/m (pF/in)	-	-
Flammability / Flame Rating	V-0**	V-0**	class	-	UL-94
Density	1,6	1,6	gr/cm^3	+/- 5%	

STORAGE CONDITIONS

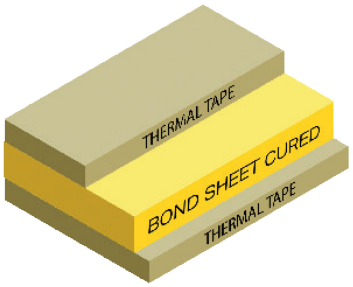
Keep storage climate conditions below 24ºC and 55% relative humidity. In the event of storing under very low warehouse temperatures give some time for the packed TIM's to stabilize to room temperature before opening. Keeping the above mentioned storage conditions and avoiding TIM's damage by humidity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

(*) Value only of the Bond Sheet Cured
(**)Flammability rating is only valid when TT50 or TT100 is cladded to an aluminium laminate of 0,8mm or higher and at the other side an FR4 with V-0 recognition with 0,8mm or higher.
(***) Only on thermal tape side.

Gabriel Benmayor S.A Bach, 2-B Pol. Ind. Foinvasa 08110 Montcada i Reixac, Barcelona info@aismalibar.com www.benmayor.com www.aismalibar.com T +34935724161 / F +34935724165

BOND SHEET CURED + 2 THERMAL TAPE TT50

Data Sheet DS_59 2/2



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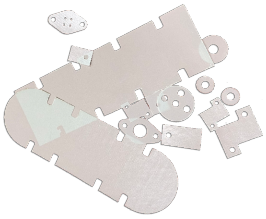

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Properties	BSC70 2TT50	BSC100 2TT50	UNITS	TOLERANCE	TEST METHOD
Thermal conductivity	1,5 (0,038)	1,5 (0,038)	W/mK (W/inK)	+/- 15%	ASTM D5470
Thermal Resistance	0,138	0,156	K/W	+/- 15%	ASTM D5470
Thermal impedance @10/30/50 psi	1,183 (0,183)	1,333 (0,207)	Kcm²/ W (Kin²/ W)	+/- 15%	ASTM D5470
Nominal thickness (pressed)	170 (6,7)	200 (7,8)	µm (mils)	+/- 15µm (0,6mils)	-
Filler type	Ceramic	Ceramic	-	-	-
Dielectric breakdown voltage, AC	≥5	≥7	kV	-	IPC TM 650 2.5.6.3
Initial Tack (Peel adhesion)	4,3	4,3	N/cm	-	ASTM D3330
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