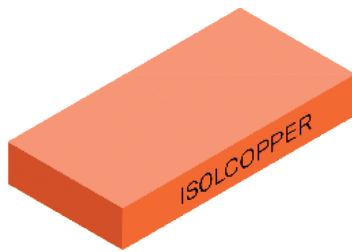


ISOLCOPPER

Data Sheet DS_62 1/1

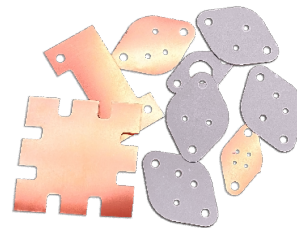
STANDARD CONSTRUCTION



**Insulation
thickness μm (mils)**
80(3.1)

DESCRIPTION

Ultra-thin layer of copper (30 micron) clad with a ultra-thin dielectric layer doped with high end mineral content. This unique technology reduces the thermal resistance to very low values and achieving a dielectric strength up to 2kV.



UL Approved QMST2
File: E47820
IPC-4101



RoHS 3 / REACH
Last updated compliance directive



Properties	ICU80 HTG	UNITS	TOLERANCE	TEST METHOD
Thermal conductivity	3 (0,076)	W/mK (W/inK)	+/- 15%	ASTM D5470
Thermal Resistance	0,264	K/W	+/- 15%	ASTM D5470
Thermal impedance @10/30/50 psi	0,031(0,005)	Kcm ² /W(Kin ² /W)	+/- 15%	ASTM D5470
Nominal thickness (pressed)	80 (3,1)	μm (mils)	+/- 15 μm (0,6mils)	-
Filler Type	Ceramic	-	-	-
Flammability / Flame Rating	V-0**	class	-	UL-94
Dielectric breakdown voltage, AC	≥ 2	kV	-	IPC TM 650 2.5.6.3
Density	4,5	g/cm ³	+/- 10%	ASTM D792
Area weight	195	g/m ²	+/- 20g/m ²	-
Continuous Working Temperature	130*	°C	-	UL-MOT
Volume Resistivity (los tenemos H Tg)	1.82E+14*	Ohm-cm	-	ASTM D257
Surface Resistivity (los tenemos H Tg)	2.14E+13*	Ohm	-	ASTM D257
Decomposition Temperature (Td) Initial	340*	°C	-	IPC-TM 650-2.3.41
Decomposition Temperature (Td) 5% loss	420*	°C	-	IPC-TM 650-2.3.41
Glass transition temperature of dielectric layer (by DSC)	180*	°C	-	IPC-TM 650-2.4.24
CTE (x,y)	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 Isolcopper

(**)Flammability rating is only valid when Isolcopper is clad 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.