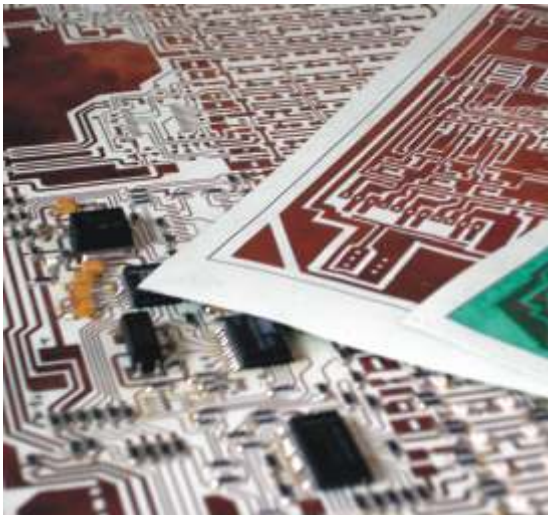


Keratherm[®] - Copper FTC 86/77

Applications:

- Motor control units
- IGBT-controlling
- Powerfull LED-Arrays

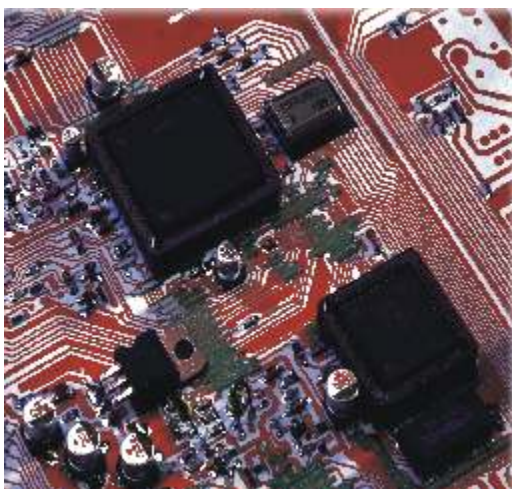


Properties	Unit	86/77 ¹⁾
Colour		green / copper
Thermal Properties		
Thermal resistance R_{th}	K/W	0.90
Thermal impedance R_{ti}	$^{\circ}\text{Cmm}^2/\text{W}$	227
	Kin^2/W	0.35
Thermal conductivity	W/mK	1.1
Electrical Properties		
Breakdown voltage $U_{d; ac}$	kV	2.0
Breakdown strength $E_{d; ac}$	KV/mm	10.0
Mechanical Properties		
Overall thickness (+/-10%)	mm	0.300
Thickness of copper layer	mm	0.037
Hardness	Shore A	85
Tensile strength	N/mm ²	70
Elongation	%	15
Physical Properties		
Application temperature	$^{\circ}\text{C}$	-60 to +250

1) Options: with adhesive coating
with netting (one or two layers)

The following copper thicknesses are available: 17 μm ; 25 μm ; 37 μm ; 50 μm ; 75 μm and 101 μm

Heat conducting films manufactured by a special process with copper film (electrolyte) on one side. The beneficial properties of the heat conducting film and copper create entirely new application possibilities, for example, active EMC protection or as a system carrier for electronic switches.



On these system carriers, power densities of 5-10 W/cm² can be realized. In this case the heat conductive silicone film carries the electrical conducting circuit paths in copper etching technique. The second conductor path layer, for example in resistors, capacitors or coils, can be produced by applying polymer paste pressure. In contrast to conventional circuit board technology, this method allows efficient production from a roll. The outstanding flexibility of the film permits the formation of interfaces and cable harnesses.

These system carriers for electronic switches represent state-of-the-art design from an economical and ecological perspective.