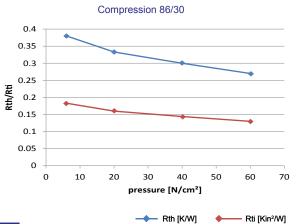


## **86/30**KERATHERM® white

## **Applications**

- Power supplies
- ◆ Audio and video components
- White goods
- Power converters (AC-DC, DC-DC)
- **◆** Engine controllers



Properties	Unit	86/30	
Colour	white		
Thermal Properties*			
Thermal resistance R <sub>th</sub>	K/W	0.22	
Thermal impedance R <sub>ti</sub>	°Cmm²/W 90		
	Kin²/W	0.13	
Thermal conductivity λ	W/mK	2.5	
Electrical Properties*			
Dielectric breakdown voltage U <sub>d; ac</sub>	kV	1.5	
Volume resistivity	$\Omega m$	2.5 x 10 <sup>11</sup>	
Dielectric loss factor tan δ		2.2 x 10 <sup>-2</sup>	
Dielectric constant ε <sub>r</sub>	3.0		
Mechanical Properties			
Hardness	Shore A	70 - 80	
Tensile strength	N/mm²	1.5	
Elongation	%	31	
Physical Properties			
Application temperature	°C	-60 to +250	
Density	g/cm³	2.33	
Flame rating	UL-94	V-0	
Possible thickness	mm	0.125 - 0.5	

\*Measured @ thickness 0.225 mm

The highly thermal conductive white films, with its well-balanced thermal, electrical and dielectric behavior and very good self-adhesion characteristics, is created by filling a silicone elastomer base with aluminum oxide. An increase in mechanical strength can be achieved through fibreglass reinforcement. These film types can optionally be supplied with an additional adhesive coating.

## **Options**

Film structure	Overall thickness	Tensile strength	Breakdown voltage U <sub>d; ac</sub> *	Thermal resistance
	mm	N/mm²	kV	K/W
with fibreglass	0.225	7.5	1.5	0.250
with fibreglass and adh. coating	0.250	7.5	1.5	0.300
with adh. coating	0.250	1.5	1.5	0.265
	with fibreglass with fibreglass and adh. coating	Hilm structure thickness mm with fibreglass 0.225 with fibreglass and adh. coating 0.250	Film structurethicknessstrengthmmN/mm²with fibreglass0.2257.5with fibreglass and adh. coating0.2507.5	$\begin{tabular}{l lllllllllllllllllllllllllllllllllll$

Data for engineer guidance only. Observed performance varies in application. Engineers are reminded to test the material in application.



## NOTE:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. KERAFOL® is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. All specifications are subject to change without notice. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded. In case KERAFOL® would be nevertheless held liable, on whatever legal ground, KERAFOL® liability will in no event exceed the amount of the concerned delivery. All KERAFOL® products are sold pursuant to the KERAFOL® Terms and Conditions of sale and delivery in effect from time to time, a copy of which will be furnished upon request.

11-2022