



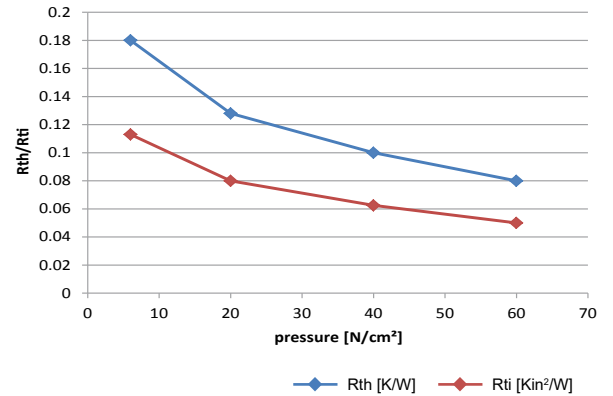
# 86/82

## KERATHERM® red

### Applications

- ◆ "high end" solution
- ◆ Control boards
- ◆ BGA applications
- ◆ Hard-disc-drives

Compression 86/82



| Properties                           | Unit       | 86/82                    |
|--------------------------------------|------------|--------------------------|
| Colour                               |            | red                      |
| Assembly                             |            | fibreglass reinforcement |
| <b>Thermal Properties</b>            |            |                          |
| Thermal resistance $R_{th}$          | K/W        | 0.09                     |
| Thermal impedance $R_{ti}$           | °Cmm²/W    | 35                       |
|                                      | Kin²/W     | 0.05                     |
| Thermal conductivity $\lambda$       | W/mK       | 6.5                      |
| <b>Electrical Properties</b>         |            |                          |
| Breakdown voltage $U_{d; ac}$        | kV         | 1.0                      |
| Dielectric breakdown $E_{d; ac}$     | kV/mm      | 4.0                      |
| Volume resistivity                   | $\Omega m$ | $2.0 \times 10^{14}$     |
| Dielectric loss factor $\tan \delta$ |            | $1.4 \times 10^{-3}$     |
| Dielectric constant $\epsilon_r$     |            | 2.4                      |
| <b>Mechanical Properties</b>         |            |                          |
| Measured thickness (+/-10%)          | mm         | 0.250                    |
| Hardness                             | Shore A    | 60 - 70                  |
| Tensile strength                     | N/mm²      | 13.0                     |
| Elongation                           | %          | 2                        |
| <b>Physical Properties</b>           |            |                          |
| Application temperature              | °C         | -40 to +200              |
| Density                              | g/cm³      | 1.23                     |
| Flame rating                         | UL-94      | V-0                      |
| Possible thickness                   | mm         | 0.25 - 0.3               |

This film is especially suitable for high power applications. It has excellent thermal and electrical properties. Thanks to its good performance, KERATHERM® red can be used reliably in densely packed electronic applications.

✓ Optional available with adhesive coating as 86/82K

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®'s liability will in no event exceed the amount of the concerned delivery. All KERAFOL® products are sold pursuant to the KERAFOL®'s Terms and Conditions of sale and delivery in effect from time to time, a copy of which will be furnished upon request.

**10-2019**