

## **Infratron Kool Pad**

## **Koolform**

| KF          | Material             | Thermal<br>Impedance °C/W<br>(Area:TO3) | Breakdown Voltage (V)<br>50Hz RMS | Temperature range |  |
|-------------|----------------------|---|-----------------------------------|-------------------|--|
| Property    | Low modulus Silicone | 1.0                                     | 5KV+                              | -60°C to +200°C   |  |
| Test Method | -                    | ASTM D5470                              | ASTM D149                         | -                 |  |



## Description

Kool-Form (KF) is a highly conformable thermally conductive Silicone that has been specifically designed to provide an excellent thermal interface between hot electronic components and their adjoining Heatsinks or mounting chassis.

Manufactured from low modulus silicone polymer and loaded with thermally conductive particles, Kool-Form actually moulds around the surface of a component significantly reducing the risk of thermally damaging air pockets or gaps existing between the component and heatsink by filling any irregularities with a thermally conductive medium. The compliant nature of Kool-Form allows it to be used in numerous applications particularly where a number of devices of uneven heights are being cooled by the same heatsink surface

| Ordering information                                  | Key performance Properties   |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Standard sheet sizes are 225mm x 225mm each.          | <ul> <li>Extremely low modulus allows components to 'bed' into pad, for<br/>excellent thermal contact</li> </ul> |  |  |  |  |  |
| Non-Adhesive  | • Easily cut at room temperature into most configurations using steel rule dies or sharp blades.                 |  |  |  |  |  |
| KF-XXNA-20x40<br>Where XX represents the thickness of | Low tooling costs for custom profiles  |  |  |  |  |  |
| the material. See below.                              | • Remains resistant to cleaning agents, and does not support organic growth                                      |  |  |  |  |  |
|   | No known deterioration over time.  |  |  |  |  |  |
|   | • Fills air gaps between components up to 50% of the pads thickness  |  |  |  |  |  |
|   | • Can be used to overlay a series of components with differing heights, and still maintain a constant contact.   |  |  |  |  |  |

| Technical Information                         | KF02          | KF05          | KF08          | KF10          | KF15          | KF25          | KF30          | KF40          | KF50          |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| % deflection @ 10psi                          | 6             | 6             | 6             | 6             | 11            | 15            | 15            | 15            | 18            |
| Thickness (mm) +/- 0.02                       | 0.25          | 0.50          | 0.75          | 1.00          | 1.80          | 2.50          | 3.30          | 4.00          | 5.00          |
| Thermal resistance T0-3<br>(°C/W)             | 0.33          | 0.58          | 0.8           | 1.0           | 1.5           | 2.1           | 2.4           | 2.7           | 3.5           |
| Thermal resistance <b>per cm</b> <sup>2</sup> | 2.0           | 3.6           | 4.9           | 6.1           | 9.2           | 12.9          | 14.7          | 16.6          | 21.5          |
| Thermal conductivity (W/mK)                   | 1.5           | 1.5           | 1.5           | 1.5           | 2             | 2             | 2.2           | 2.2           | 2.2           |
| Colour  | Light<br>Grey |
| Breakdown voltage V                           | 5K+           |
| Datasheet Issue                               | 03            |               |               |               |               |               |               |               |               |

For further information on this or any other thermal material call our help line on ++49-(0)89-15 81 26-0 and visit our website at www.Infratron.de

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