



## TECHNICAL DATA SHEET

### RS 503-357

### Non-Silicone Heat Transfer Compound

RS 503-357 is recommended where the efficient and reliable thermal coupling of electrical and electronic components is required, or between any surface where thermal conductivity or heat dissipation is important. It should be applied to the base and mounting studs of diodes, transistors, thyristors, heat sinks, silicone rectifiers and semi-conductors, thermostats, power resistors and radiators.

RS 503-357 contains no silicones and thus cannot migrate onto electrical contacts with consequent high contact resistance, arcing or mechanical wear. Similarly, soldering problems caused by silicones will not be encountered. A non-silicone product is essential for applications where the use of silicone in any product is prohibited or where the specification set by the company states this.

- Excellent non-creep characteristics.
- Wide operating temperature range.
- Excellent thermal conductivity even at high temperatures.
- Easy to handle.
- Economic in use.
- Low in toxicity.
- White colour enables treated parts to be easily identified.
- Low evaporation weight loss.

**Approvals**                      **RoHS-2 Compliant (2011/65/EU):**                      **Yes**

<b>Properties:</b>	Colour:	White
	Base:	Blend of synthetic fluids
	Thermo-conductive Component:	Powdered metal oxides
	Thermal Conductivity:	0.65 W/m.K
	Density @ 20°C:	2.0 g/cm <sup>3</sup>
	Temperature Range:	-40°C to +130°C
	Permittivity @ 10 <sup>6</sup> Hz:	4.2
	Specific Resistance:	1 x 10 <sup>14</sup> Ohms/cm
	Dielectric Strength:	40 kV/mm
	Penetration:	210-250

### Directions for Use

Apply a thin film, to the base and mounting studs of many component types including diodes, transistors, thyristors, heatsinks, silicone rectifiers, semiconductors, thermostats, power resistors and radiators.

Heat transfer compounds can be applied using a variety of methods including, screen printing, brushing and by the use of a roller.