

## FEATURES

- Ultra-soft
- High compressibility
- Good thermal conductivity
- Compliancy, high compressibility
- Natural tack
- Low oil bleed: long-term stability
- Electrical insulation

## Thermal Interface Sheet, Silicone, 6W/m·K, 150 x 150mm 0.5mm

RS Stock No.: 915-6058



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

RS PRO range of gel type silicone thermal pads which offer high performance and come in a multitude of thermal conductivity ratings and thicknesses. They are ultra-soft and have a natural tack making installation simple and suitable for a wide scope of applications.

Options available:

Silicone gel pad, glass 150x150 mm (glass filled for added performance)

[915-6039](#) - 0.5 mm

[915-6032](#) - 1.0 mm

[915-6036](#) - 1.5 mm

[915-6045](#) - 2.0 mm

Silicone gel pad, 4W/mK, 150x150 mm

[915-6048](#) - 0.5 mm

[915-6042](#) - 1.0 mm

[915-6051](#) - 1.5 mm

[915-6054](#) - 2.0 mm

Silicone gel pad, 6W/mK, 150x150 mm

[915-6058](#) - 0.5 mm

[915-6067](#) - 1.0 mm

[915-6060](#) - 1.5 mm

[915-6064](#) - 2.0 mm

Silicone gel pad, 8W/mK, 150x150 mm

[915-6073](#) - 0.5 mm

[915-6076](#) - 1.0 mm

[915-6070](#) - 1.5 mm

[915-6089](#) - 2.0 mm

## General Specifications

<b>Material</b>	Silicone
<b>Self-Adhesive</b>	Yes
<b>Colour</b>	Red
<b>Applications</b>	Electronics components; Flat panel displays; LED (light emitting diode) displays; Engine control units; Computer hard drives; Wireless communication hardware
<b>Flame Rating</b>	V0 UL94
<b>Shelf Life</b>	24months

## Electrical Specifications

<b>Dielectric Strength</b>	>10kV/mm
<b>Dielectric Constant at 1kHz</b>	5
<b>Volume Resistivity</b>	>10 <sup>12</sup> ohm.cm
<b>Insulation Strength</b>	12kV/mm

## Mechanical Specifications

<b>Dimensions</b>	150x150mm
<b>Thickness</b>	0.5mm
<b>Length</b>	150mm
<b>Width</b>	150mm
<b>Diameter</b>	75mm
<b>Thermal Conductivity</b>	6W/(m.K)
<b>Hardness</b>	Shore OO 50
<b>Thermal Impedance</b>	<0.28°C-in <sup>2</sup> /W
<b>Specific Gravity</b>	3.4g/cm <sup>3</sup>
<b>Weight Loss</b>	<0.4%
<b>Elongation</b>	60%
<b>Tensile Strength</b>	0.1MPa
<b>Density</b>	2.85g/cm <sup>3</sup>
<b>Deflection At 10 psi</b>	3%
<b>Young's Modulus</b>	24N/cm <sup>2</sup>
<b>Compression Ratio at 1mm, 40psi</b>	20%
<b>Thermal Resistance</b>	0.8W/m.K
<b>Coefficient Of Thermal Expansion</b>	250ppm/K
<b>Dissipation Factor At 1000kHz</b>	0.013

## Operation Environment Specifications

<b>Minimum Operating Temperature</b>	-55°C
<b>Maximum Operating Temperature</b>	200°C

## Approvals

Compliance/Certifications

CE / UR / cUR

RS Stock Number	Part number	Total thickness	Sheet size
9156058	GCS-060-S-150150-0.5	0.5mm	150x150mm
9156067	GCS-060-S-150150-1.0	1.0mm	150x150mm
9156060	GCS-060-S-150150-1.5	1.5mm	150x150mm
9156064	GCS-060-S-150150-2.0	2.0mm	150x150mm

Characteristic	Test Method	Value
Colour	Visual	Dark Red
Thickness mm	-	0.5 - 2.0
Density g/cm <sup>3</sup>	ASTM D792	2.85
Hardness (Shore 00)	ASTM D2240	50
Application temperature °C	-	-50 - +200
Tensile strength MPa	ASTM D412	0.1
Elongation %	ASTM D412	60
Total mass loss %	ASTM E595	<0.4
<b>Compression</b>		
Deflection@10 psi %	ASTM D575	5
Deflection @20 psi %	ASTM D575	10
Deflection @30 psi %	ASTM D575	15
Deflection @40 psi %	ASTM D575	20
Deflection @50 psi %	ASTM D575	25
<b>Electrical</b>		
Dielectric breakdown kV/mm	ASTM D419	>10
Volume resistivity Ohm-m	ASTM D257	>10 <sup>12</sup>
<b>Thermal</b>		
Thermal conductivity W/m <sup>2</sup> K	ASTM D5470	6
Thermal impedance @10 psi °C-In <sup>2</sup> /W	ASTM D5470	0.34
Thermal impedance @30 psi °C-In <sup>2</sup> /W	ASTM D5470	0.32
Thermal impedance @50 psi °C-In <sup>2</sup> /W	ASTM D5470	0.28