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Datasheet

Silicone gel interface material

RS Stock Numbers: 9156048, 9156042, 9156051, 9156054

GCS-040-S is a high performance soft gel type silicone thermal interface material

Features

- Super soft
- High compressibility
- Very good thermal conductivity
- Compliancy, high compressibility
- Natural tack
- Low oil bleed- long term stability
- Electrical insulation

Configurations

RS Stock Number	Part number	Total thickness	Sheet size
9156048	GCS-040-S-150150-0.5	0.5mm	150x150mm
9156042	GCS-040-S-150150-1.0	1.0mm	150x150mm
9156051	GCS-040-S-150150-1.5	1.5mm	150x150mm
9156054	GCS-040-S-150150-2.0	2.0mm	150x150mm

Applications

Displays, lighting protection

PDP TV, LCD CCFL and LCD LED display backlight, LED signage, projectors and new display technology.

Consumer and industrial electronics

Mobile telephone, communication base station, laptop, notebook, computer servers, handheld gaming devices, memory modules, CPU modules, amplifiers, batteries, and DC to DC covertors power supplies.

Automotive electronics

Engine management, electronic suspension, braking systems, communication and multimedia systems, comfort conveniance features, vehicle lighting, vehicle controls, hybrid vehicle battery thermal management, electric vehicle thermal management.

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Characteristic	Test Method	Value
Colour	Visual	Blue / Violet
Thickness mm	-	0.5 - 2.0
Density g/cm^3	ASTM D792	2.8
Hardness (Shore 00)	ASTM D2240	45
Application temperature °C	-	-40 - +160
Tensile strength MPa	ASTM D412	0.1
Elongation %	ASTM D412	60
Total mass loss %	ASTM E595	<0.4
Compression		
Deflection@10 psi %	ASTM D575	11
Deflection @20 psi %	ASTM D575	20
Deflection @30 psi %	ASTM D575	26
Deflection @40 psi %	ASTM D575	31
Deflection @50 psi %	ASTM D575	35
Electrical		
Dielectric breakdown kV/mm	ASTM D419	>10kV
Volume resistivity Ohm-m	ASTM D257	>10^{12}
Thermal		
Thermal conductivity W/m*K	ASTM D5470	4
Thermal impedence @10 psi °C-In2/W	ASTM D5470	0.48
Thermal impedence @30 psi °C-In2/W	ASTM D5470	0.47
Thermal impedence @50 psi °C-In2/W	ASTM D5470	0.38

Building the part number

Example: GCS - 040 - S 150150 - 0.5 - XX
1 2 3 4 5 6

1. GCS series
2. Thermal conductivity
3. Silicone or non-silicone
4. Dimensions (mm)
5. Thickness (mm)
6. Custom