

Thermally Conductive Silicone Adhesive

TIA0220

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Global Electronic Materials Technology Center

TIA0220 is a one-component silicone adhesive that cures on exposure to atmospheric moisture at room temperatures to form a thermally conductive silicone rubber. The product offers corrosion-free adhesion to metals, including copper, plastics, ceramics, glass, etc. without the use of primers.

Key Features

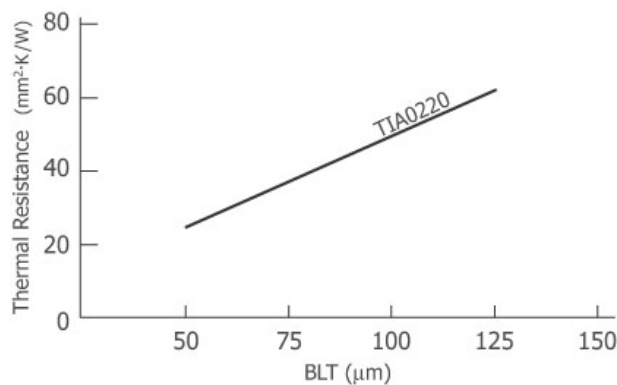
- ◆ High thermal conductivity
- ◆ Low volatility: reduced low molecular siloxane content
- ◆ Non-corrosive to metals (including copper)
- ◆ One-component, fast alkoxycure
- ◆ Wide operating temperature range: -40~+150°C

Typical Properties

Uncured Properties		
Appearance / Color		Semi-flowable, gray paste
Viscosity	Pa·s	300
Tack free time (23 °C)	min	10
Cured Properties (7d @ 23°C, 50%RH)		
Thermal Conductivity	W/m·K	2.2
Thermal Resistance (BLT)	mm ² ·K/W	25 (50 μm)
Density	g/cm ³	2.87
Hardness (Type A)		88
Tensile Strength	MPa	5.2
Elongation	%	40
Adhesive Strength	MPa	4.2
Volume Resistivity	MΩ·m	1.0 x 10 ⁷
Dielectric strength	kV/mm	20
Low Volatile Siloxane (D ₃ -D ₁₀) wt%		0.002

Typical property data values should not be used as specifications.

Thermal Resistance and BLT



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Handling and Safety

- ◆ Use appropriate eye protection and gloves when handling this product.
- ◆ If ingested, induce vomiting and consult a physician immediately.
- ◆ In case of contact to eyes, immediately flush with water for 15 minutes, and consult a physician.
- ◆ In case of contact to skin, wipe with cloth or paper, and rinse with soap and water.
- ◆ Store the product away from exposure to direct sunlight.
- ◆ Keep out of reach of children.