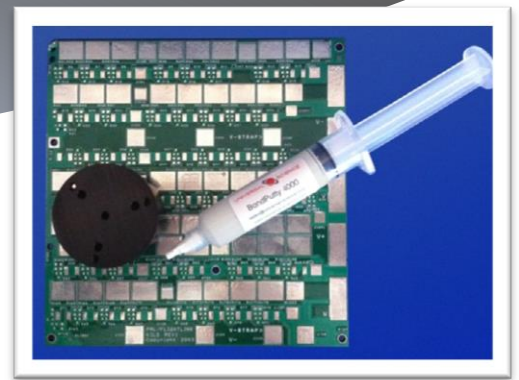


BondPutty 4000

Thermal Bonding Adhesive



BondPutty 4000 is a silicone, self-bonding adhesive sealant that delivers excellent thermal conductivity and forms a tough elastomeric bond.

Pre-cure **BondPutty 4000** is non-slumping, thixotropic in nature and paste-like in consistency, enabling simple application. **BondPutty 4000** cures at elevated temperatures of above 100°C to form a bonding sealant which maintains a thermal connection between two surfaces. The cure rate of **BondPutty 4000** is dependent on time taken for sealant to reach required curing temperature and amount of compound dispensed. **BondPutty 4000** is a highly suitable compound for use in the encapsulation of electronic assembly devices.

Features

- One part dispensing, silicone based, adhesive paste compound- before cure
- Thermal conductivity = 4.0 W/mK
- After cure period, forms a strong, structural, adhesive bond

Availability and Storage

- Typically supplied in cartridges or bulk pail containers, other types of packaging are considered on request
- Shelf life of 6 months at temperatures between -5°C and 10°C

Physical Properties (Post-cure: 15 mins at 150°C, 3mm thick)

Property (unit)	Test Method	BondPutty 4000
Colour	Visual	Grey
Operating Temp.(°C)	In House	-55 to +200
Thermal Conductivity (W/mK)	ASTM D5470	4.0
Hardness (Shore A)	ASTM D2240-95	58
Viscosity – pre-cure (mPas)	Brookfield	760,000
Specific Gravity (@25°C)	ASTM D70	2.20

Benefits and Applications

- Cures to form a strong elastomeric bond that delivers excellent thermally conductive and dielectric properties
- Non-corrosive, tough yet flexible bond
- Suitable for use in chemically sensitive applications and encapsulating electronic assembly devices

Application and Cure

- Small beads of 1mm to 2mm can be cured with air gun
- Thicker beads or large sections require the use of an oven or induction heating source
- Increasing temperature will reduce cure time although these must not exceed 200°C

Electrical and Mechanical Properties: (Post-cure: 1 hour at 125°C, 3mm thick)

Property (unit)	Test Method	BondPutty 4000
Volume Resistivity (Ω-cm)	ASTM D257	4.4 x 10 ¹²
Tensile Strength (MPa)	BS903	1.55
Elongation at Break (%)	BS903	80
Volumetric Thermal Expansion (ppm/°C)	-	370
Linear Thermal Expansion (ppm/°C)	-	120

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