DM-TIM-15035

DYCOTEC MATERIALS

Product Description

DM-TIM-15035 is a one part, non-silicone high thermal conductivity paste. The materials are supplied in a syringe for use on automated dispensing equipment or can be manually processed depending on packaging option. Materials do not require a cure/dry process. As a non-silicone paste, this material does not suffer from silicone oil leach or migration effects. Paste is RoHS and REACH compliant.

Product Benefits

- Non-silicone (no migration, leach-out or contamination)
- Excellent stability for devices operating at high temperature
- High Thermal Conductivity (3.5 W/m.K)
- No cure
- Tacky/thixotropic paste

Applications

Interface for semiconductors requiring low pressure or spring clamp mounting. Consumer electronics, Set-top boxes, IP routers, ECUs Memory and Power modules. CPU to Heat sink, Transistors, Diodes, IGBTs, Rectifiers, LED. TEC modules, Telecommunication hardware and as a gap filler for battery systems.

Physical Properties

Test	Properties
Viscosity (Pa·s) (Brookfield, Spindle RV-7, 10 rpm, 25.5°C)	20 - 30
Density (ASTM D792)	3.0 g/cm^3
Colour	Grey
Flow Rate (30cc syringe with no tip attachment, 0.100" orifice, 90psi)	80 - 100 g/min

Thermal/Electrical Properties

Parameter	Properties
Thermal Conductivity (ASTM D5470)	3.5 W/m.K
Thermal Contact Resistance (ASTM D5470)	4 x 10^{-6} m^2·K/W
Dielectric Strength (ASTM D149 MOD)	>5 kV/mm
Volume Resistivity (ASTM D257)	>1 x 10^{11} Ω·cm
Dielectric Constant (ASTM D150)	14.4 (1 KHz)

Durability Performance

Parameter	Properties
Operating Temperature Range	-40 to +125°C
Thermal Stability (125°C, JESD22-A103)	1000 hours
Weight loss (125°C,1000 hours)	<0.2%

Storage and shelf-life

Shelf life in unopened original package is 24 months for materials packaged in pots. Shelf life is 6 months for syringe packaged materials. Materials should be stored at temperatures 15-22°C.

Safety and Handling

For safe use of this product, please review relevant material and safety datasheet (MSDS).

Packaging

Available for manual use with manual plunger DM-TIM-15035-SYP-10 (10cc) or 30cc, 50cc syringes eg DM-TIM-15035-SY-XX (where XX = 30 or 50).
Larger syringe sizes eg 70cc, 180cc, 360cc and 600cc or pot packaging 250g and 1Kg (DM-TIM-15035-P) available on request.

For more information, please contact:

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All information reported in the datasheet is for experimental work undertaken in our laboratories and illustrates typical values only. Processing conditions may vary depending on customers' experience and their application requirements and manufacturing process equipment set-up.

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