

Techsil's Thermal Management Solutions

Thermal Management Materials Summary

Effective control of heat is an increasing concern among today's electronic device manufacturers and, as products become more compact, the need to dissipate damaging heat effectively is greater than ever. To address the thermal demands of today's electronic devices, Techsil provides a complete portfolio of high-performance, user-friendly materials to suit a variety of current and future heat control needs. Here we highlight some of those products best in range in ascending order of thermal conductivity.

Momentive TSE3941 - 0.83 W/mK Flame Retardant Silicone

TSE3941 silicone adhesive from Momentive will protect parts against moisture and provides protection against mechanical and thermal shock. This grade offers a fast cure at ambient temperatures and offers outstanding adhesion properties, including to most plastics. TSE3941 provides great resistant to heat, cold, moisture, chemicals, UV and ozone.



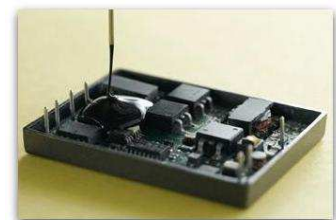
Techsil® HTC - 0.9 W/mK Non-Silicone Heat Transfer Compound

Techsil HTC was designed for thermal coupling of electrical components. As it contains no silicones, it cannot migrate onto electrical contacts with consequent high contact resistance, arcing or mechanical wear. HTC offers excellent non-creep characteristic whilst operating throughout a wide temperature range. A low toxicity product, easy to handle and economic in use.



Techsil® EP25485 Epoxy - 1.15 W/mK Flame Retardant Epoxy

Ideal for potting and encapsulating, Techsil EP25485 offers a good surface finish with high electrical strength (18kV/mm); low cure shrinkage and good resistance to water and chemicals. Compatible with most circuit board components and offers an operating temperature range between -40°C up to +150°C.



ITW Stokvis TIM 202331 - 2.1 W/mK Heat Transfer Tape

This thermally conductive heat transfer tape from ITW Stokvis provides a trustworthy bond whilst allowing heat to transfer and dissipate quickly. In addition to this thermal conductivity, TIM 202331 also offers good heat resistance, age resistance and weatherability. Performs exceptionally well when bonding to stainless steel.



Contact Details

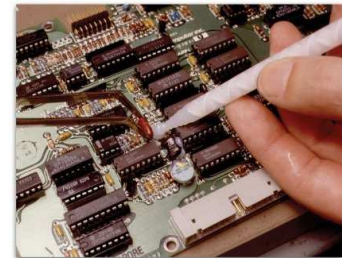
Techsil® TIM11021G - 2.1 W/mK Silicone Paste

Techsil TIM11021g exhibits virtually no oil separation and minimal weight loss at elevated temperatures, this contributes to the stability of this grade under broad operational temperature ranges. Recommended to use between heat spreaders, heat sinks and heat pipes.



Techsil® RTV1084g Silicone - 2.3 W/mK Non-Corrosive Silicone

This is a ready-to-use one-part grey silicone rubber. With an excellent track record for automotive module bonding, RTV1084g is a very popular product. It is fast skinning and cures to a 67 Shore A tough rubber with low linear shrinkage. Non corrosive and solvent free - it does not corrode copper or its alloys. It exhibits excellent primerless adhesion to many substrates.



Techsil TIS11138G - 3.6 W/mK 1 Part RTV Silicone Gap Filler

One-component thixotropic adhesive paste that cures at room temperature to form a thermally conductive silicone gel. Tack free in 30 minutes, this mechanically stable material can be used in 3-dimensional and vertical TIM applications. The cured gel is soft, stress absorbing and gives a repairable heat path.



Momentive TIA241GF – 4.1 W/mK 2 Part Flame Retardant

TIA241GF is a 2-component, light blue silicone paste. After being applied, its non-slumping pasty consistency provides physical stability to prevent run-off after dispense. TIA241GF can be used as a liquid-dispensed alternative to pre-fabricated Thermal Pads, and as a Gap Filler for a broad array of thermal designs in electronic components. Flame retardant, 1:1 mixing ratio, repairable, fast low temp. cure, soft to give stress relief during thermal cycling.



Momentive TIS420C – 4.2W/mK 1 Part Thixotropic Silicone Paste

One-component, condensation cure, thixotropic paste with high thermal conductivity of 4.2 W/mK. Dark grey silicone that cures to a soft, stress-absorbing, gap filling gel. It is self-skinning and is stable in 3-dimensional and vertical TIM applications and gives a repairable path.



Contact Details