



SOFT, SILICONE GEL

Tputty™ 504 is a soft silicone gel thermal gap filler ideal for applications where large gap tolerances are present.

The silicone gel is filled with a complex matrix of ceramic fillers to yield superior thermal performance.

Tputty™ 504 is soft and compliant transferring little to no pressure between interfaces. Because Tputty™ 504 has a higher viscosity than grease, it eliminates the bleed and pump-out usually associated with grease. Bond line variances can also be more easily controlled than with traditional thermal pads.

Tputty™ 504 can be applied like grease and is easily dispensable from a wide range of commercially available equipment including screen print, syringe and automated equipment.

FEATURES AND BENEFITS

- Soft and compliant transferring little to no pressure between interfaces
- 1.8 W/mK thermal conductivity
- Available in 10cc, 30cc and 55cc syringes
- Available in 100cc, 170cc and 305cc auto dispense cartridges
- Available in bulk containers from sample jars through 20 kg pails
- Applies like grease and is easily dispensable from a wide range of commercially available equipment including screen print, syringe and automated equipment

APPLICATIONS

- Flip chip microprocessors
- PPGAs, micro BGAs, BGAs
- DSP chips, graphic accelerator chips
- Other high-wattage electronic components
- LED lighting

global solutions: local support™

Americas: +1.800.843.4556

Europe: +49.8031.2460.0

Asia: +86.755.2714.1166

CLV-customerservice@lairdtech.com

www.lairdtech.com/thermal

	Tputty™ 504	TEST METHOD
Construction & Composition	Ceramic-filled dispensable silicone gel	
Color	Light Grey	Visual
Viscosity @ 23°C, mPa.s (cP) Brookfield RV, TC spindle, Helipath @ 0.5 rpm	4,000,000 to 8,000,000	
Temperature Range	-45°C to 200°C	
Thermal Conductivity	1.8 W/mK	ASTM D5470
Density	2.7 g/cc	
Thermal Impedance Final Thickness @ 0.010"	0.15°C-in²/W (0.97°C-cm²/W)	ASTM D5470 (modified)
Thermal Impedance Final Thickness @ 0.020"	0.27°C-in²/W (1.74°C-cm²/W)	ASTM D5470 (modified)
Dielectric Strength	500 VAC/mil	ASTM D149
Volume Resistivity	>10 ¹⁴ ohm-cm	ASTM D2240
MSDS	Available upon request	
Outgassing TML, wt% / vol%	0.34 / 0.92	ASTM E595
Outgassing CVCM, wt% / vol%	0.09 / 0.24	ASTM E595

Data for design engineer guidance only. Observed performance varies in application.
Engineers are reminded to test the material in application.

THR-DS-Tputty-504 1111

Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user, since Laird Technologies and its agents cannot be aware of all potential uses. Laird Technologies makes no warranties as to the fitness, merchantability or suitability of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies products are sold pursuant to the Laird Technologies Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2011 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trade marks or registered trade marks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.

A13850-00 Rev I, 11/2011

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Laird Technologies:

[A13717-03](#) [A13717-02](#) [A13717-05](#) [A15731-01](#) [A13717-01](#) [A15685-00](#) [A13926-02](#) [A13926-01](#) [A15638-01](#)
[A13717-04](#) [A13926-04](#) [A13926-03](#) [A15669-01](#)