



Q-Pad® 3

Technical Data Sheet

December 2008

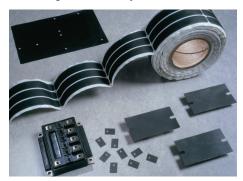
click here to contact us
e-mail: service@stockwell.com • (800) 523-0123

PRODUCT DESCRIPTION

Glass-Reinforced Grease Replacement Thermal Interface

FEATURES AND BENEFITS

- Thermal impedance: 0.35°C-in²/W (@50 psi)
- Eliminates processing constraints typically associated with grease
- · Conforms to surface textures
- · Easy handling
- May be installed prior to soldering and cleaning without worry



Q-Pad® 3 eliminates problems associated with thermal grease such as contamination of electronic assemblies and reflow solder baths. Q-Pad® 3 may be installed prior to soldering and cleaning without worry. When clamped between two surfaces, the elastomer conforms to surface textures thereby creating an air-free interface between heat-generating components and heat sinks.

Fiberglass reinforcement enables Q-Pad® 3 to withstand processing stresses without losing physical integrity. It also provides ease of handling during application.

Note: To build a part number, visit our website at www.bergquistcompany.com.

TYPICAL PROPERTIES OF Q-PAD 3						
PROPERTY	IMPERIAL VALUE		METRIC VALUE		TEST METHOD	
Color	Black		Black		Visual	
Reinforcement Carrier	Fiberglass		Fiberglass		_	
Thickness (inch) / (mm)	0.005		0.127		ASTM D374	
Hardness (Shore A)	86		86		ASTM D2240	
Continuous Use Temp (°F) / (°C)	-76 to 356		-60 to 180		_	
ELECTRICAL						
Dielectric Breakdown Voltage (Vac)	Non-Insulating		Non-Insulating		ASTM D149	
Dielectric Constant (1000 Hz)	NA		NA		ASTM D150	
Volume Resistivity (Ohm-meter)	102		102		ASTM D257	
Flame Rating	V-O		V-O		U.L.94	
THERMAL						
Thermal Conductivity (W/m-K)	2.0		2.0		ASTM D5470	
THERMAL PERFORMANCE vs PRESSURE						
Press	sure (psi)	10	25	50	100	200
TO-220 Thermal Performance (°C/W)		2.26	1.99	1.76	1.53	1.30
Thermal Impedance (°C-in²/W) (1)		0.65	0.48	0.35	0.24	0.16
1) The ASTM D5470 test fixture was used. The recorded value includes interfacial thermal resistance. These values are provided for						

TYPICAL APPLICATIONS INCLUDE

- · Between a transistor and a heat sink
- Between two large surfaces such as an L-bracket and the chassis of an assembly
- · Between a heat sink and a chassis
- Under electrically isolated power modules or devices such as resistors, transformers and solid state relays

reference only. Actual application performance is directly related to the surface roughness, flatness and pressure applied.

CONFIGURATIONS AVAILABLE

- · Sheet form, die-cut parts and roll form
- With or without pressure sensitive adhesive



Disclaimer

Note:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or or all recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkelwouldbenevertheless held liable, on whateverlegal ground, Henkel's liability will inno event exceed the amount of the concerned delivery. In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentionedherein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of $merchant ability \, or fitness for a \, particular purpose, arising from \, sale \, or \, use$ of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or United States or foreign patents or patent applications. Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office

Reference 0.1