

THERMAL PASTE



GENERAL DESCRIPTION:

The thermal paste is offered as an accessory to several Wavelength Electronics product lines to help ensure adequate thermal control during operation.

THERM-PST is a non-silicone thermal compound. Comprised of proprietary poly synthetic fluid and zinc oxide, it spreads easily for excellent surface coverage and thermal conductivity.

Placement on the product surface will vary with Wavelength product and heat sink model selected.

FEATURES:

- Paste form
- Spreads easily
- Excellent thermal conductivity -- up to 3.0 W / °C
- For use with multiple heat sink models
- Coverage area is approximately 4" by 6" (100x150 mm)

For Use With

PLD-5KCH	5 Amp Laser Diode Driver
PLD-10KCH	10 Amp Laser Diode Driver
All MPT Series	MP Temperature Controller
All MPL Series	MP Laser Diode Driver
LDTC 0520	0.5 Amp Laser Driver with Temp Control
LDTC1020	1.0 Amp Laser Driver with Temp Control
LDTC 2/2	2.2 Amp Laser Driver with Temp Control
HTC Series	HTC Temperature Controller
PTC-CH Series	PTC Chassis Mount Temperature Control

APPLYING THE PASTE

Thermal paste should be applied thinly and evenly across the mounting area. Refer to the individual product manual to determine the best location for thermal paste application.

A single heat sink is available for a broad range of products (P/N: MULTI-HTSK). The drawings below illustrate coverage area on the Wavelength products listed:

Figure 1 illustrates placement for the large model MPT and MPL series.

Figure 2 illustrates placement for the small model MPT and MPL series.

Figure 3 illustrates placement for the LDTC 2/2.

Figure 4 illustrates placement for the PLD chassis mount series, and LDTC xx20 models.

Figure 5 illustrates placement for the PTC chassis mount series.

A heat sink for the HTC, not shown, is also available (P/N: HTCHEATSINK).

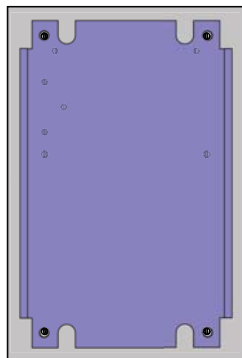


Figure 1

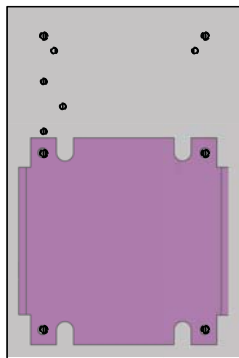


Figure 2

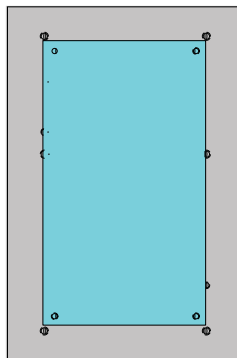


Figure 3

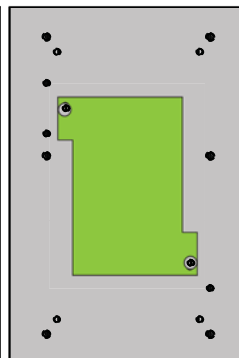


Figure 4

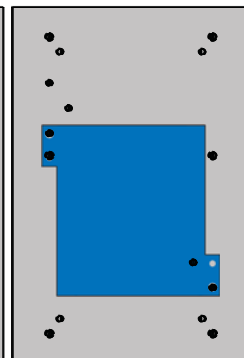


Figure 5

MATERIAL DATA AND SAFETY SPECIFICATIONS

COMPOSITION -- Non-silicone

Chemical Name	% Weight
Poly Synthetic Fluid	>20
Zinc Oxide	>60

STABILITY AND REACTIVITY

This product is stable under normal conditions. Avoid contact with all oxidizing agents. Carbon monoxide and carbon dioxide are hazardous decomposition products. Hazardous polymerization will not occur. Product is not sensitive to mechanical shock, but avoid high temperatures and ignition sources.

HAZARD IDENTIFICATION

There are no hazardous components present.

FIRST AID MEASURES

Inhalation: Remove individual to fresh air. If breathing has been arrested, provide artificial respiration or oxygen. Keep patient warm. Obtain immediate medical attention. Not an expected route of entry. Overexposure may cause irritation of the mucous membranes and respiratory tract.

Skin: Wash thoroughly with soap and water. Rinse thoroughly. Seek medical advice if contact was extensive. Prolonged direct skin contact may cause dermatitis or irritation.

Eye Contact: Wash thoroughly with water while holding eyelids apart. Seek immediate medical attention. Overexposure to direct eye contact may cause redness, irritation, discomfort or tearing.

Ingestion: May produce laxative effect. Seek immediate medical attention. Never give anything by mouth to an unconscious person. Symptoms may include: headache, dizziness, nausea, intestinal disorders, and unconsciousness. Not an expected route of exposure. Ingestion may cause abdominal pains, cramping, nausea, or vomiting.

FIREFIGHTING MEASURES

Flash Point: >400°F

Fire Hazard: Not considered a potential fire and explosion hazard under normal operating conditions

Extinguishing Media: Foam, dry chemical, or CO₂. Water spray may be used to cool containers. Do not allow contaminated water to enter sewers or waterways.

Firefighting Instructions: In case of fire, use normal fire fighting equipment including a NIOSH approved self-contained breathing apparatus (SCBA). Use water to cool containers.

EXPOSURE CONTROLS & PERSONAL PROTECTION

Wear chemical goggles, gloves, and other protective clothing. Provide safety and hygiene equipment consistent with all applicable federal, state, and local regulations. General exhaust ventilation is usually sufficient for general worker safety and comfort.

HANDLING AND STORAGE

Store in a cool area away from ignition sources and oxidizers. Store in a tightly sealed container.
KEEP OUT OF REACH OF CHILDREN.

CERTIFICATION AND WARRANTY

CERTIFICATION:

Wavelength Electronics (Wavelength) certifies that this product met its published specifications at the time of shipment. Wavelength further certifies that its calibration measurements are traceable to the United States National Institute of Standards and Technology, to the extent allowed by that organization's calibration facilities, and to the calibration facilities of other International Standards Organization members.

WARRANTY:

This Wavelength product is warranted against defects in materials and workmanship for a period of 90 days from date of shipment. During the warranty period, Wavelength will, at its option, either repair or replace products which prove to be defective.

WARRANTY SERVICE:

For warranty service or repair, this product must be returned to the factory. An RMA is required for products returned to Wavelength for warranty service. The Buyer shall prepay shipping charges to Wavelength and Wavelength shall pay shipping charges to return the product to the Buyer. However, the Buyer shall pay all shipping charges, duties, and taxes for products returned to Wavelength from another country.

LIMITATIONS OF WARRANTY:

The warranty shall not apply to defects resulting from improper use or misuse of the instrument or operation outside published specifications.

No other warranty is expressed or implied. Wavelength specifically disclaims the implied warranties of merchantability and fitness for a particular purpose.

EXCLUSIVE REMEDIES:

The remedies provided herein are the Buyer's sole and exclusive remedies. Wavelength shall not be liable for any direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory.

REVERSE ENGINEERING PROHIBITED:

Buyer, End-User, or Third-Party Reseller are expressly prohibited from reverse engineering, decompiling, or disassembling this product.

NOTICE:

The information contained in this document is subject to change without notice. Wavelength will not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material. No part of this document may be photocopied, reproduced, or translated to another language without the prior written consent of Wavelength.

SAFETY:

There are no user serviceable parts inside this product. Return the product to Wavelength for service and repair to ensure that safety features are maintained.

LIFE SUPPORT POLICY:

As a general policy, Wavelength Electronics, Inc. does not recommend the use of any of its products in life support applications where the failure or malfunction of the Wavelength product can be reasonably expected to cause failure of the life support device or to significantly affect its safety or effectiveness. Wavelength will not knowingly sell its products for use in such applications unless it receives written assurances satisfactory to Wavelength that the risks of injury or damage have been minimized, the customer assumes all such risks, and there is no product liability for Wavelength. Examples of devices considered to be life support devices are neonatal oxygen analyzers, nerve stimulators (for any use), auto transfusion devices, blood pumps, defibrillators, arrhythmia detectors and alarms, pacemakers, hemodialysis systems, peritoneal dialysis systems, ventilators of all types, and infusion pumps as well as other devices designated as "critical" by the FDA. The above are representative examples only and are not intended to be conclusive or exclusive of any other life support device.

REVISION HISTORY

REVISION	DATE	NOTES
REV. C	Apr-08	Initial release
REV. D	25-Sep-09	Updated to reflect RoHS status
REV. E	18-Jun-10	Updated for new product composition



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