



### HYBRID THERMAL/EMI ABSORBER

CoolZorb 500 is a 2<sup>nd</sup> generation hybrid absorber/thermal management material that is used for EMI mitigation. Product is used like a traditional thermal interface material between heat source such as an IC and heat sink or other heat transfer device or metal chassis. CoolZorb 500 also functions to suppress unwanted energy coupling, resonances or surface currents causing board level EMI issues.

### FEATURES AND BENEFITS

- Designed using silicone gel binder that imparts inherent tack typical of standard thermal gap fillers
- Filler particle composition imparts both excellent thermal conductivity and good EMI suppression in the microwave frequency range with best attenuation performance at or above 5 GHz.
- CoolZorb 500 passes UL94V0 requirements
- Product does not require peel and stick adhesive when used like a traditional thermal interface material

### VALUE

- Dual functional properties of thermal conductivity and EMI reduction provide two in one solution for easier design and assembly and lower cost of ownership
- Improved reliability performance of electronics
  - Better signal integrity due to reduction of EMI
  - Consistent performance of electronics due to temperature stability and low outgassing properties of product
- Improved EMC performance and resultant lower cost to meet compliance requirements
- Environmentally friendly solution that meets regulatory requirements including RoHS and REACH

TYPICAL PROPERTIES	DATA	TEST METHOD
Color	Dark gray	Visual
Thermal conductivity	4.0W/m-K	ASTM D5470
Density	3.4 g/cc	ASTM D792
Hardness	55 Shore 00	ASTM D2240
Tensile strength	45 psi	ASTM D638
Temperature Range	-40°C to 175°C	NA
UL Flammability	UL94V0	UL
Volume resistivity	1 x 10 <sup>11</sup> Ω*cm	ASTM D257
Outgassing (TML)	0.093%	ASTM E595-07
Outgassing (CVCN)	0.011%	ASTM E595-07
Coefficient of Thermal Expansion (CTE)	118 μm/mC	IPC-TM-650 2.4.41
EMI Attenuation @ 5 GHz	9.4 dB/cm	
EMI Attenuation @ 15 GHz	17.3 dB/cm	
Standard Thickness range	.020"-.125" (0.5-3.1mm)	
Thickness Tolerance	+/- .005" (+/- .127mm)	

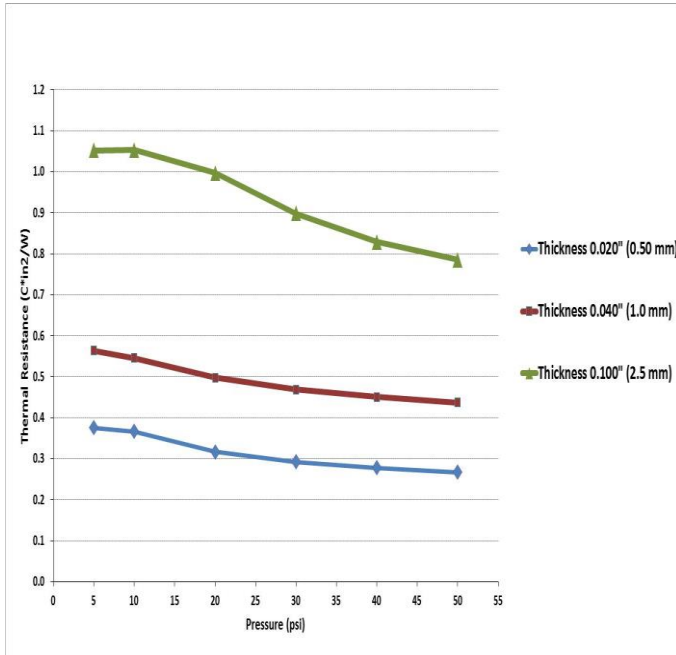
Americas: +1.866.928.8181

Europe: +49.(0).8031.2460.0

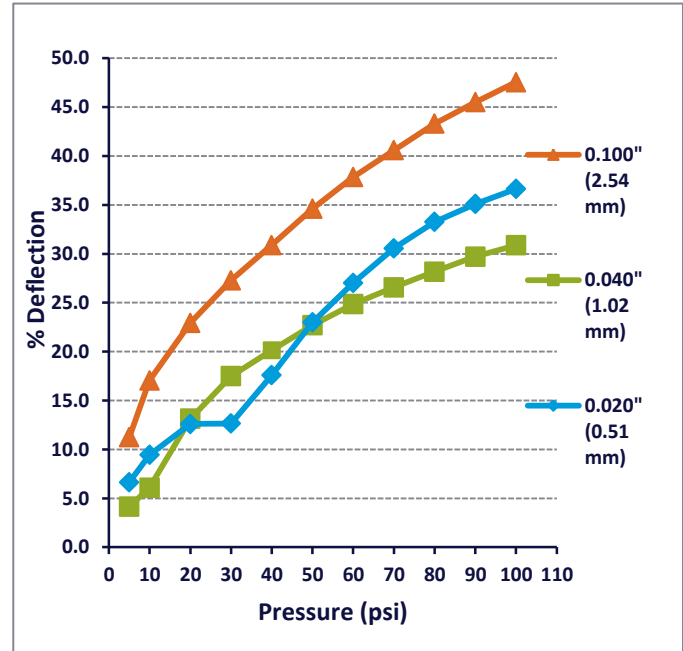
Asia: +86.755.2714.1166

[www.lairdtech.com](http://www.lairdtech.com)

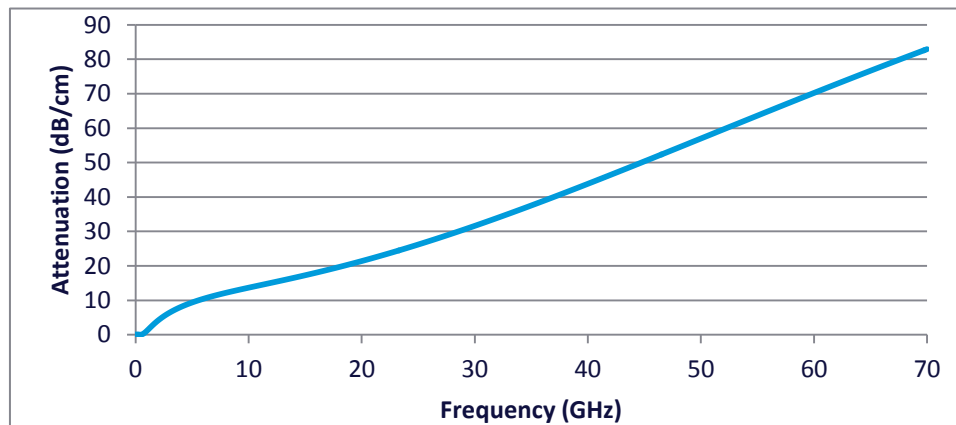
CoolZorb 500 Thermal resistance at 100C (ASTM D5470)



CoolZorb 500 Percent Deflection (ASTM D575)



CoolZorb 500 Attenuation (dB/cm)



### AVAILABILITY

- Standard sheet size is 12" X 12"
- Thickness availability range is .020" - .125" (0.5mm- 3.1mm)
- Common standards for thickness are .020", .040", .060", .080", .100" and .125" thickness (0.5mm, 1.0mm, 1.5mm, 2.0mm, 2.5mm and 3.1mm)
- No charge samples are available in 4" X 4" size for each of the above common thicknesses

### PART NUMBER SYSTEM

- CoolZorb 500 series absorber sheets (12"X12") use the following designation when ordering: CZ500-XXX where XXX is thickness of absorber in thousands of an inch
- CoolZorb 500 series no charge absorber samples (4"X4") use the following designation when ordering: CZ500S-XXX where XXX is thickness of absorber in thousands of an inch

RFP-DS-COOLZORB 500 110915

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. Laird Technologies makes no warranties as to the fitness, merchantability, suitability or non-infringement 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 2015 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trademarks or registered trademarks 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.



# Hybrid Thermal/EMI Absorber

- Example: CZ500-020 = CoolZorb 500, .020"X12"X12" sheet size; Example: CZ500S-040 = CoolZorb 500, .040"X4"X4 no charge sample size

RFP-DS-COOLZORB 500 110915

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. Laird Technologies makes no warranties as to the fitness, merchantability, suitability or non-infringement 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 2015 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trademarks or registered trademarks 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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.