

## Hybrid Thermal/EMI Absorber for 5G High Frequency



### HYBRID THERMAL/EMI ABSORBER FOR 5G HIGH FREQUENCY

CoolZorb 5G is a hybrid absorber/thermal management material that is used for EMI mitigation at high frequency. 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 5G also functions to suppress unwanted energy coupling, resonances or surface currents causing board level EMI issues.

### FEATURES AND BENEFITS

- Both excellent thermal conductivity and good EMI suppression in the microwave frequency range
- Inherent surface tack
- Passes UL 94 V-0 requirements

### MARKETS

- Telecom Infrastructure
- Optical Transceiver
- Handset /Consumer
- Server

### SPECIFICATION

TYPICAL PROPERTIES	DATA	TEST METHOD
Color	Dark gray	Visual
Thermal conductivity	3.5W/m-K	ASTM D5470
Density	3.5 g/cc	ASTM D792
Hardness (3 sec)	59.5 Shore 00	ASTM D2240
Tensile strength	17.3 psi	ASTM D638
Temperature Range	-40°C to 175°C	NA
UL Flammability	UL 94 V-0 Pending	UL
Volume resistivity	$8 \times 10^{13} \Omega \cdot \text{cm}$	ASTM D257
Tensile Strength	>4 Mpa	
Outgassing (TML)	0.31%	ASTM E595-07
Outgassing (CVCM)	0.04%	ASTM E595-07
Coefficient of Thermal Expansion (CTE)	214 $\mu\text{m/mC}$	IPC-TM-650 2.4.41
Standard Thickness range	0.040"-0.200" (1.0-5.1mm)	
Thickness Tolerance	+/- 10% of nominal	

USA: +1.866.928.8181

Europe: +49.8031.24600

Asia: +86.755.2714.1166

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



Coolzorb 5G 062718

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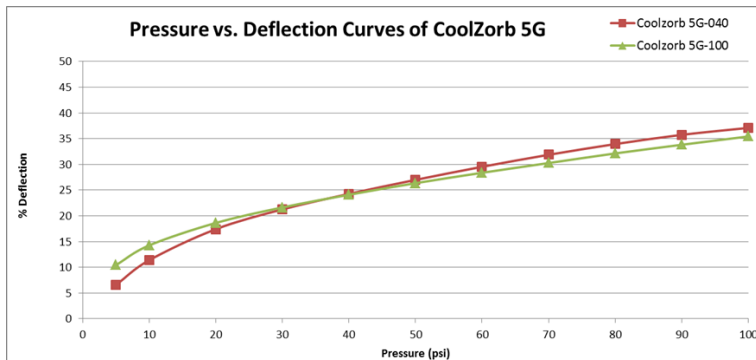
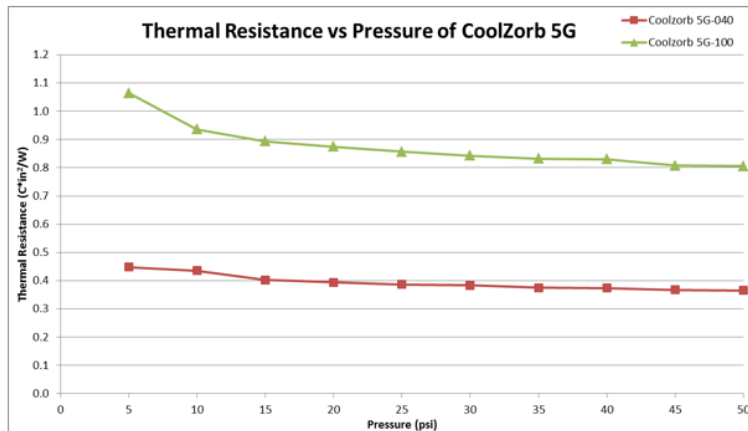
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### AVAILABILITY

- Standard sheet size is 18" X 18"
- Thickness availability range is .040" - .200" (1.0mm- 5.1mm)
- Common standards for thickness are .040", .060", .080", .100" and .125" thickness ( 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

- CoolZorb 5G series absorber sheets (18"X18") use the following designation when ordering: CZ5G-XXX where XXX is thickness of absorber in thousands of an inch
- CoolZorb 5G series no charge absorber samples (4"X4") use the following designation when ordering: CZ 5G-XXX where XXX is thickness of absorber in thousands of an inch
- Example: CZ 5G = CoolZorb 5G, .040"X18"X18" sheet size;  
Example: CZ 5GS-040 = CoolZorb 5G, .040"X4"X4 no charge sample size



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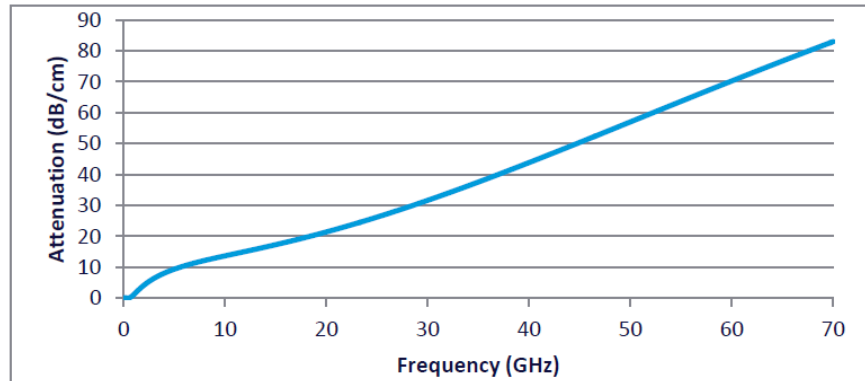
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# Coolzorb 5G

## Hybrid Thermal/EMI Absorber for 5G High Frequency

CoolZorb 5G Attenuation (dB/cm)



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