GRAFTech International | eGRAF®

eGRAF SPREADERSHIELD SS1500:
Winner of the 2011 R&D 100 Award

SPREADERSHIELD™

Flexible Graphite Thermal Solutions

eGRAF SPREADERSHIELD solutions provide superior heat spreading compared to aluminum and copper and are ideal for a wide range of electronics applications, from the thinnest and lightest weight to higher power devices.

The unique, patented solutions take advantage of graphite's anisotropic thermal properties to both shield heat from sensitive areas and distribute heat evenly to eliminate hot spots.

Features

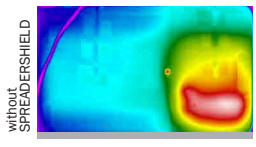
- In-plane conductivity 300-1500 W/mK
- Anisotropic ratio up to 300:1
- Thicknesses as low as 25µm
- 30% lighter than Al and 80% than Cu
- Continuous reel-to-reel format

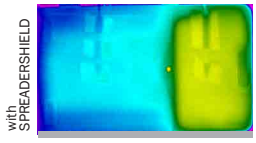
Benefits

- Spreads heat up to 4x Copper and 7x Aluminum
- Eliminates hot-spots and protects sensitive areas
- Enables the slimmest device designs
- Saves weight compared to metal alternatives
- Suitable for high volume production

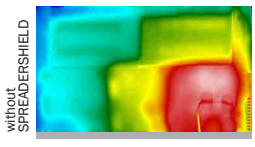
Applications

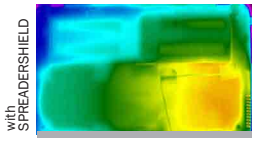
Handheld Devices



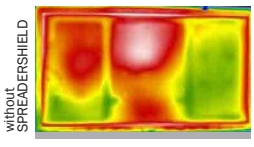


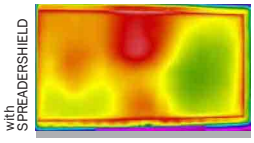
Mobile Computing & Entertainment Devices



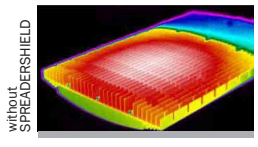


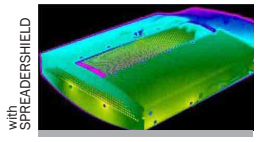
Large Displays





Lighting





Coating Options	Laminated with plastics, adhesives or metal foils optimized for your application
Thermal Conductivity	300, 400, 500, 600, and now 1500 W/mK*
Availability	Rolls, sheets, or die-cut parts, depending on application
Thickness Range	From 0.025 to 0.940mm (varies depending on thermal conductivity)
Certifications	Meets RoHS certifications
Flammability Rating	UL94V-0

* Properties listed are typical and cannot be used as accept/reject specifications

Applications		300 W/mK SS300	300 W/mK SS300-FLX	400 W/mK SS400	500 W/mK SS500	600 W/mK SS600	1500 W/mK SS1500
	3G/4G Phones					●	●
	Cameras					●	●
	Gaming Devices			●	●	●	●
	Pico Projectors				●	●	●
	Notebooks/Netbooks	●		●	●		
	Tablets				●	●	●
	eBook Readers			●	●	●	●
	Portable Media Players				●	●	●
	LED/CCFL LCD Displays	●		●	●		
	OLED Displays				●	●	●
	Plasma Displays	●					
	All-in-One Computers	●		●	●		
	Public Information Displays	●		●	●		
	Automotive Displays			●	●		
	Outdoor LED Area Lighting	●	●	●	●		
	Indoor General LED Lighting	●	●	●	●		
	Under Cabinet LED Lighting	●	●	●	●		
	Puck and Can LED Lighting	●	●	●	●		
	Automotive LED Lighting	●		●	●		

Our global team of Applications Engineers are knowledgeable about graphite and applications spanning multiple industries. These include metallurgical casting, electronics, chemical, nuclear, defense/aerospace, solar, LED, semiconductor, and other high temperature processes.

Regardless of your product design phase (concept, prototyping, or mass production), we offer technical answers to some of your most challenging problems with a fast response time.

Please contact a GrafTech Applications Engineer today at applicationsengineering@graftech.com

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Redefining limits

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