

Flexible Graphite Thermal Solutions

Passive Thermal Management for LCD, OLED and Other Ultra Thin Displays

eGRAF SPREADERSHIELD™ ultra-thin flexible graphite heat spreaders eliminate hot spots and can dramatically improve display image quality.

- Improves brightness uniformity
- Decreases image sticking and burn-in
- Minimizes warping of back light unit and films
- Reduces chassis distortion
- Reduces the severity of stress-induced birefringence
- RoHS compliant and UL 94V-0 certified



The SPREADERSHIELD Difference



LED-LCD TV

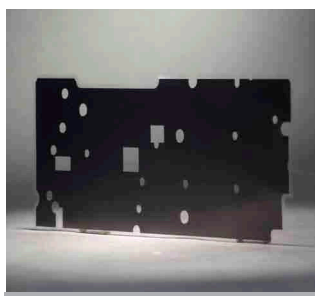


without SPREADERSHIELD



with SPREADERSHIELD

Applying SPREADERSHIELD to this display results in a 4°C gradient temperature reduction



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
- Convenient die-cut 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



LCD and LCD-LED Display Panels



OLED Displays



Plasma Display Panels (PDPs)



All-in-One Computers



Digital Information Displays

Applications		300 W/mK	400 W/mK	500 W/mK	600 W/mK	1500 W/mK
		SS300	SS400	SS500	SS600	SS1500
	LED/CCFL LCD Displays	●	●	●		
	OLED Displays			●	●	●
	Plasma Displays	●				
	All-in-One Computers	●	●	●		
	Public Information Displays	●	●	●		
	Automotive Displays		●	●		

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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