

# FIBER THERMAL INTERFACE (FTI) FAQ

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#### Is the material electrically conducting in the x-y direction?

FTI is electrically conductive in the XY directions. The electrical conductivity depends on the fiber packing fraction.

### What is the minimum/maximum x-y sizes?

Minimum size depends on the diameter size. Maximum size would be 12" by 12".

#### What is the minimum/maximum thickness?

The minimum thickness would be 0.3mm, while the maximum thickness would be 5cm.

# What is the minimum/maximum pressure requirements?

The minimum pressure requirements would be .1psi and maximum would be 200psi.

# How many removable insertion cycles can FTI achieve?

Depends on application and gap compression, please ask your KULR representative for more information.

# Can FTI interface be used as a sliding interface?

Yes, it can be used as a sliding interface.

# What is the percentage compressibility?

This depends on volumetric fiber fraction, thickness and if fiber are canted. Please ask your KULR representaive for more information.

#### Can FTI handle vibrations?

Yes, it can handle vibrations.

# What is the operating temperature range?

Operating temperature (for FTI) is determined by matrix and adhesive.



### How many thermal cycles can FTI withstand? If so, at what temperatures?

Fibers don't degrade below 300°C (No oxidation). The adhesive is the part that could degrade.

# Can FTI support applications with CTE mismatch?

Yes, FTI can support CTE mismatch.

#### Is there any surfaces FTI cannot be used with (i.e., silicon)?

No, FTI can be used with any surface.

#### Can FTI be used in conjunction with thermal grease?

Yes, FTI can be used with thermal grease.

#### Does FTI have anti-static properties?

Yes, it is electrically conductive.

### Does FTI have EMI shielding properties?

Yes, it does have EMI shielding properties.

# Does FTI need a burning process before use?

No, it does not need a burning process before use.

#### Will carbon fibers break off from normal use?

They can, but encapsulation of the product will prevent generation of debris.

# Can broken carbon fibers short circuit my application?

Carbon fibers will most likely not short circuit your application.

# Do I need to replace FTI after rework?

This will depend on the application. If the FTI doesn't have an adhesive side, then rework might be needed.

# Is FTI bendable and can be made tacky?

Yes, FTI is a bendable product and can also be made tacky.

# Can FTI be di-cut to complex form factors? Can it also conform to surface irregularities?

Yes, FTI can be di-cut. It will also be able to conform to any types of surfaces.