



Optimizing Thermal Conductivity

Polymers, by their very nature, have poor thermal conductivity. Simply stated, when heat is applied, it does not conduct through the plastic quickly. Metals on the other hand have very high thermal conductivity - the closely packed molecular structure aids in the conduction of heat energy.

The base polymer is the poorest conductor of thermal energy. However, with the addition of mineral fillers and glass fibers, the thermal conductivity can be improved.

The thermal conductivity of polymer composites is important in applications where the part is exposed to elevated temperatures. If your application requires long term heat exposure, you may want to consider improving the thermal conductivity.

And if this is the case, remember that TPG can formulate a product to maximize thermal conductivity for your application.

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