



Our Innovation. *Your Edge.*

## P-THERM<sup>®</sup> LED Lighting Technology

The light-emitting diode (LED) is one of today's most energy-efficient and rapidly-developing lighting options available. Polymer Science, Inc. offers a complete line of P-THERM<sup>®</sup> Thermal Interface Materials that are designed to efficiently and effectively aid in the conduction of heat to meet the growing thermal management requirements providing cooling to LED components to increase usable life.

### Applications

- Aviation Lighting
- Cameras
- Traffic Signals
- Automotive Lighting
- Infotainment
- Light Bulbs
- Horticulture
- Electronic Displays

### Polymer Science, Inc. Advantages

- Lower minimum order quantity
- Customization of width to minimize waste
- Standard and customized construction available
- Short lead times
- Excellent in-house and field technical support
- Eco-friendly facility
- Design Support

### Attributes of LEDs

- Small chip size and low cost
- Long life time
- High energy efficiency
- Low temperature
- Flexibility in design
- Many colors
- Eco-friendly
- High switching speed
- High luminous intensity
- Designed to focus its light in a particular direction
- Less affected by damages
- Less radiated heat
- More resistant to thermal shock and vibrations
- No presence of UV Rays



## Custom Solutions...

Our design team works quickly to provide the solutions you need, allowing your project to expeditiously move from conception to production. Our diverse team of engineers and technical staff, along with our state-of-the-art equipment provide the capabilities to develop a quality product consistent with your application requirements.



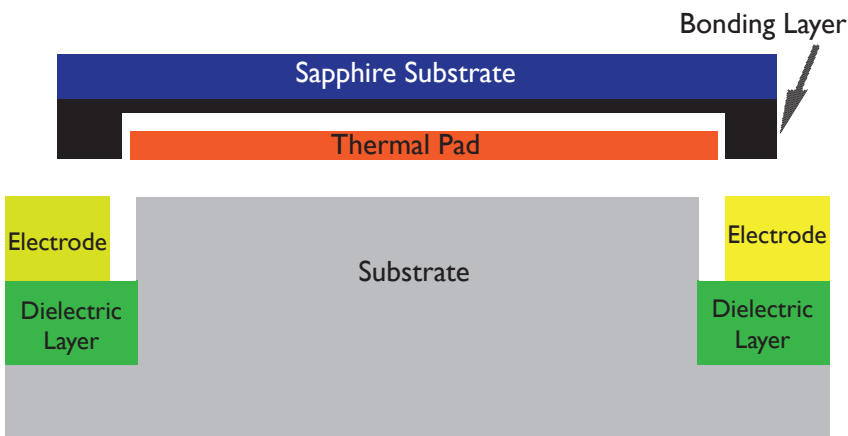
Polymer Science, Inc. offers a multitude of thermal gap fillers, as well as, dielectric pads for all of your LED lighting needs. We are able to supply P-THERM® Gap Filler Pad materials on rolls, providing maximum material yield with silicone & non-silicone options available. Our P-THERM® ECIs offer good dielectric and thermally conductive properties without the worry of flow from wax-based products or the mess associated with thermal grease. The natural tack of the materials mitigates movement during assembly.

### Thermal Gap Fillers

- Thermal Conductivities: 1-5W/m K
- Thickness Range: 0.10 – 5mm
- Durometer Range(Shore 00): 5 – 80
- Various colors available, including Black
- All Gap Filler Pad Products are rated ULV-0
- RoHS and HF Compliant
- Good surface wetting
- Conformable

### Dielectric Pads

- High dielectric breakdown strength
- Thermally conductive
- High temperature resistance
- Good flexibility
- RoHS and HF Compliant



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