

CUSTOMER

LED lighting designer and retrofitter

PART

Thermal interface pad

MATERIAL

Saint-Gobain Therm-A-Cool® TF407

APPLICATION

Thermal interface pad conducts heat from the LED board to the heat sink.

CHALLENGE

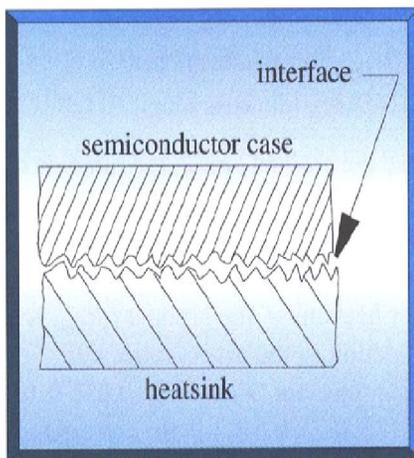
The customer's business involves removing conventional bulbs from existing lighting structures and replacing them with LEDs (light-emitting diodes). LED lighting is a popular option, because it is better for the environment and has a longer service life than conventional lighting. However, LEDs produce more heat than many original lighting fixtures can handle. As a result, the brilliance of the light is weakened and the life span is shortened. To manage the extra heat, the customer was using thermal grease, but it was messy and contaminating other components. They needed an alternative.

SOLUTION

Marian offered to supply the customer with a thermal interface pad that would perform well at conducting the heat to the heat sink and also be cost effective. The pad eliminated the need for messy thermal grease and ensured the integrity of the other LED lighting components.

CUSTOMER BENEFITS

- ◆ Marian narrowed down the many thermal management material choices to a proven material that was clean and conducted heat well.
- ◆ The thermal interface pad offered a more uniform coverage of the LED board surface area, which meant that the transfer of heat was optimized.
- ◆ Marian provided significant cost savings to the customer by replacing thermal grease with a thermal pad, thus ensuring that the other LED lighting components would last longer.
- ◆ Marian also produced the parts on rolls, which made assembly easier and more efficient.



Interface gap needs a thermal pad



LED Board



Thermal Interface Pad

Retrofitted LED Stoplight

