



Tpcm™ 580 Series Phase Change Material

Tpcm™ 580 Series are high performance thermal phase change materials designed to meet the thermal, reliability, and price requirements of high end thermal applications. Tpcm™ 580 Series is inherently tacky, flexible and exceptionally easy to use. Tpcm™ 580 is available in four thicknesses 0.003" (Tpcm™ 583), 0.005" (Tpcm™ 585), 0.008" (Tpcm™ 588) and 0.010" (Tpcm™ 5810).

At temperatures above its transition temperature of 50°C (122°F), Tpcm™ 580 Series begins to soften and flow, filling the microscopic irregularities of the components it contacts. The result is an interface with minimal thermal contact resistance. Due to the gradual change in viscosity (softening), Tpcm™ 580 Series minimizes migration (pump out).

Tpcm™ 580 Series can be supplied as cut parts in strips and rolls with top tabbed liners for easy application. The top tabbed liner can be removed immediately or provide a protective cover during shipping and removed at assembly. Tpcm™ 580 Series can also be supplied in sheets and custom die cut configurations. Tpcm™ 580 Series meets all environmental requirements including RoHS.

| Item # | Color | Thickness | Density | Thermal Resistance at 10 psi | Thermal Resistance at 20 psi | Thermal Resistance at 50 psi |
|-----------|-------|--------------------------|-----------|--|--|--|
| Tpcm 680 | Gray | 0.008 inches 0.010 mm | N/A | N/A | N/A | N/A |
| Tpcm 585 | Gray | 0.005 inches 0.127 mm | 2.87 g/cc | 0.020 °C-in ² /W 0.130 °C-cm ² /W | 0.016 °C-in ² /W 0.100 °C-cm ² /W | 0.013 °C-in ² /W 0.080 °C-cm ² /W |
| Tpcm 588 | Gray | 0.008 inches 0.200 mm | 2.87 g/cc | 0.020 °C-in ² /W 0.130 °C-cm ² /W | 0.016 °C-in ² /W 0.100 °C-cm ² /W | 0.013 °C-in ² /W 0.080 °C-cm ² /W |
| Tpcm 5810 | Gray | 0.010 inches 0.250 mm | 2.87 g/cc | 0.020 °C-in ² /W 0.130 °C-cm ² /W | 0.016 °C-in ² /W 0.100 °C-cm ² /W | 0.013 °C-in ² /W 0.080 °C-cm ² /W |