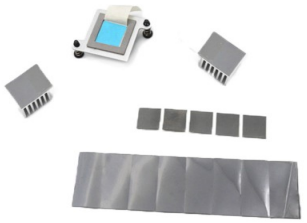
# TIC®800G Series
# Thermal Conductive Phase Change Material

**TIC®800G Series** is a thermally conductive phase change material with high reliability and high thermal conductivity. It is solid at room temperature, facilitating operation and installation. When it reaches a specific phase transition temperature, the material softens and becomes semi-fluid, fully filling the microscopic gaps between the heat-generating interface and the heat sink, significantly reducing the contact thermal resistance and achieving good heat transfer efficiency. This material can solve the heat dissipation problem of medium and high power density electronic devices under transient or steady-state operation.



## Features

- High thermal conductivity
- Soft surface
- Low thermal resistance
- Self-adhesive, no additional adhesive required

## Applications

- Power conversion equipment
- Smartphone main chip
- Audio-visual products
- Load processor

## Typical Properties of TIC®800G Series

| Product Name | TIC®804G | TIC®805G | TIC®806G | TIC®808G | TIC®810G | TIC®812G | Test Method |
|---|---|---|---|---|---|---|---|
| Color | Gray | | | | | | Visual |
| Thickness (inch/mm) | 0.004<br>0.10 | 0.005<br>0.13 | 0.006<br>0.15 | 0.008<br>0.20 | 0.010<br>0.25 | 0.012<br>0.30 | ASTM D374 |
| Density (g/cm$^3$) | 2.3 | | | | | | ASTM D792 |
| Phase Change Temperature (℃) | 50~60 | | | | | | ZKTM J052 |
| Recommended Operating Temperature (℃) | -40~125 | | | | | | ZKTM J025 |
| Dielectric Constant @1MHz | 4.9 | | | | | | ASTM D150 |
| Thermal Conductivity (W/m·K) | 5.0 | | | | | | ASTM D5470 |
| | 5.0 | | | | | | ISO22007 |
| Thermal Impedance (℃·in$^2$/W) @50psi | 0.028 | 0.031 | 0.032 | 0.049 | 0.064 | 0.078 | ASTM D5470 |
| Flame Rating | V-0 | | | | | | Equivalent to UL94 |

## Product Specifications

**Standard Thicknesses:** 0.004" (0.10 mm), 0.005" (0.13 mm), 0.006" (0.15 mm), 0.008" (0.20 mm), 0.010" (0.25 mm), 0.012" (0.30 mm)

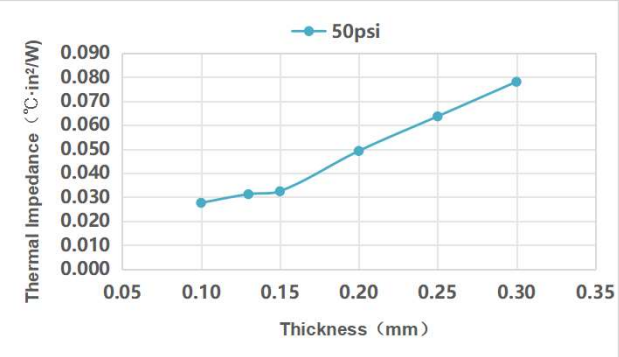
**Standard Size:** 11.811" × 19.685" (300 mm × 500 mm)

**Pressure-sensitive Adhesive:** Not applicable to TIC® series products.

The TIC® series can be die-cut into different shapes.

If you need different thicknesses and specifications or would like to learn more about thermal conductive materials, please contact our company.

## Thermal Impedance




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