

# TPS587/588/589

## Thermal Conductive Sealing

LiPOLY TPS589 is a double pack silicon material for gap filling. The viscosity and flowing is very low. The high deformation material, which can filling the gap closely, cover the tolerance, and has outstanding conductivity, makes is suitable for filling the peculiar gap.

LiPOLY' s ability of research and development is providing our best thermal solution to customers, which can satisfy customer special requirement on advanced product.



### Features-

- Thermal conductivity: 2.0/1.5/0.8 W/m\*K
- Tow-parts package and easy to use
- Waterproof and air-tight

### Typical Applications-

- Automotive electronics
- Telecommunications
- Computer and peripherals
- Thermally conductive vibration dampening
- Between any heat-generating component and a heat sink

### Preservation-

- It can be preserved for 12 months under the condition of unopened and under room temperature 25°C.

| PROPERTY                   | TPS587            | TPS588            | TPS589            | TEST METHOD | UNIT              |
|----------------------------|-------------------|-------------------|-------------------|-------------|-------------------|
| Color                      | White/Gray        | White/Gray        | White/Gray        | -           | -                 |
| Resin Base                 | Silicone          | Silicone          | Silicone          | -           | -                 |
| A:B                        | 1:1               | 1:1               | 100:3             | -           | -                 |
| Viscosity (dynamic at 23°) | 15                | 20                | 5                 | ASTM D2196  | PaS               |
| Density                    | 2.15              | 2.0               | 1.8               | ASTM D792   | g/cm <sup>3</sup> |
| Application temperature    | -60~180           | -60~180           | -60~180           | -           | °C                |
| Curing Condition 1         | 100°C/5 min       | 100°C/5 min       | RT 7 day          | -           | -                 |
| Curing Condition 2         | 60°C/30 min       | 60°C/30 min       | -                 | -           | -                 |
| Curing Condition 3         | 25°C/300 min      | 25°C/300 min      | -                 | -           | -                 |
| Hardness                   | 10                | 25                | 50                | ASTM D2240  | Shore A           |
| <b>ELECTRICA</b>           |                   |                   |                   |             |                   |
| Dielectric breakdown       | 350               | 350               | 350               | ASTM D149   | V/mil             |
| Volume resistivity         | >10 <sup>13</sup> | >10 <sup>12</sup> | >10 <sup>11</sup> | ASTM D257   | Ohm-m             |
| <b>THERMAL</b>             |                   |                   |                   |             |                   |
| Thermal Conductivity       | 2.0               | 1.5               | 0.8               | ASTM D5470  | W/m*K             |

※These data are provided for reference only. Engineers are reminded to test the material in varied application.