

## TGP1200, 1500, 3000, 5000, 6000 and 8000 Thermal Gap Filler Pad

### BENEFITS AND FEATURES

- High thermal performance
- Ultra-high compressibility for low stress applications
- Excellent surface wetting for low contact resistance
- High reliability
- Electrically insulating

### OVERVIEW

Honeywell TGP series Thermal Gap Filler Pads provide high thermal performance with ease of use across multitude of applications. Its ultra-high compressibility enables low stress and excellent conformity to mating surfaces. It is designed to minimize thermal resistance at interfaces and maintain excellent performance through reliability testing. TGP series products are naturally tacky and require no additional adhesive which might weaken thermal performance. Products are available in thickness range from 0.5mm to 5.0mm.

### TYPICAL APPLICATIONS

- Consumer electronics
- Telecommunications & network servers
- Automotive electronics
- Power devices & modules
- Semiconductors logics & memory

### STORAGE & USE

Shelf life 12 months at 0 ~ 35°C and <65% RH

| Product Name                                                           | TGP 1200           | TGP 1500           | TGP 3000           | TGP 5000           | TGP 6000           | TGP 8000           | Test Method |
|------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------|
| Color                                                                  | Blue               | Grey               | Yellow             | Blue               | Grey               | Grey               | Visual      |
| Thickness (mm)*                                                        | 0.5-5              | 0.5-5              | 0.5-5              | 0.5-5              | 0.5-5              | 0.5-5              | ASTM D374   |
| Thermal Conductivity (W/m·K)                                           | 1.2                | 1.5                | 3.0                | 5.0                | 6.0                | 8.0                | ASTM D5470  |
| Thermal Impedance (°C ·in <sup>2</sup> /W) (1mm@10psi) (Typical Value) | 1.19               | 0.85               | 0.51               | 0.3                | 0.25               | 0.2                | ASTM D5470  |
| Hardness (Shore00)                                                     | 40                 | 40                 | 40                 | 45                 | 40                 | 30                 | ASTM D2240  |
| Density (g/cc)                                                         | 1.75               | 1.8                | 3.1                | 3.3                | 3.3                | 3.4                | ASTM D792   |
| Dielectric Constant@1MHz                                               | 4.5                | 5.5                | 6.8                | 5.5                | 8.5                | 8.3                | ASTM D150   |
| Volume Resistivity (ohm·cm)                                            | 4x10 <sup>12</sup> | 2x10 <sup>13</sup> | 5x10 <sup>13</sup> | 9x10 <sup>13</sup> | 4x10 <sup>15</sup> | 7x10 <sup>15</sup> | ASTM D257   |
| Flammability Rating                                                    | V-0                | V-0                | V-0                | V-0                | V-0                | V-0                | UL94        |

\* Thickness range: 0.5-5.0mm with 0.25mm incremental  
 There is one layer of fiberglass for the pad less than 1mm  
 Thickness Tolerance: >1mm, ±10%  
                                   0.5-1mm, ±0.1mm  
                                   <0.5mm, ±0.05mm  
 Please check thickness availability before order

### Honeywell Electronic Materials

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 Mainland China: 400-840-2233  
 Germany: 49-5137-999-9199  
 Japan: 81-3-6730-7092  
 Korea: 82-2-3483-5076  
 Singapore: 65-6580-3593  
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