

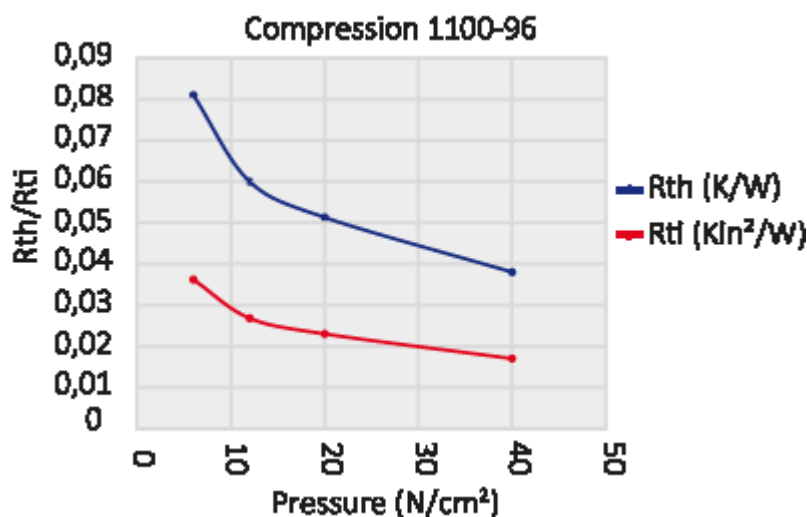
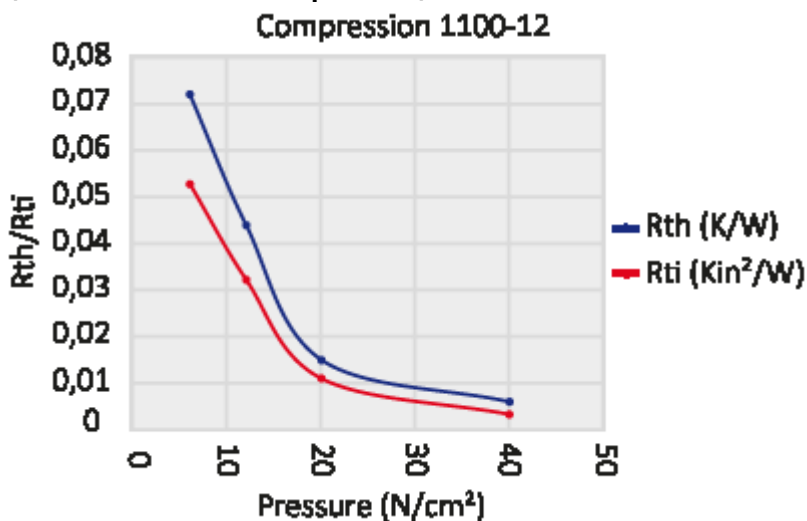
## 1100 - Thermal grease

Infratron Thermal grease is a ceramic-filled single-component silicone with high thermal conductivity. The non-crosslinked thermal compounds will not dry out and the silicone components do not leak out of the compound. The silicone-free thermal compound 1100-12 consists of 0,04 of synthetic, thermal polymer and is suitable for 0,03 fast and effective heat dissipation. The paste is particularly suitable for silicone-sensitive applications. The long-term stability of our 1100 Series guarantees full functionality during the entire lifetime of the product. Under normal application conditions Thermal grease will not cure, dry out, or melt. Special storage of Thermal grease is not required and it can be stored without special conditions for up to 12 months. If any separation of the filler materials is noted, the 1100 Series must be mixed thoroughly before use.

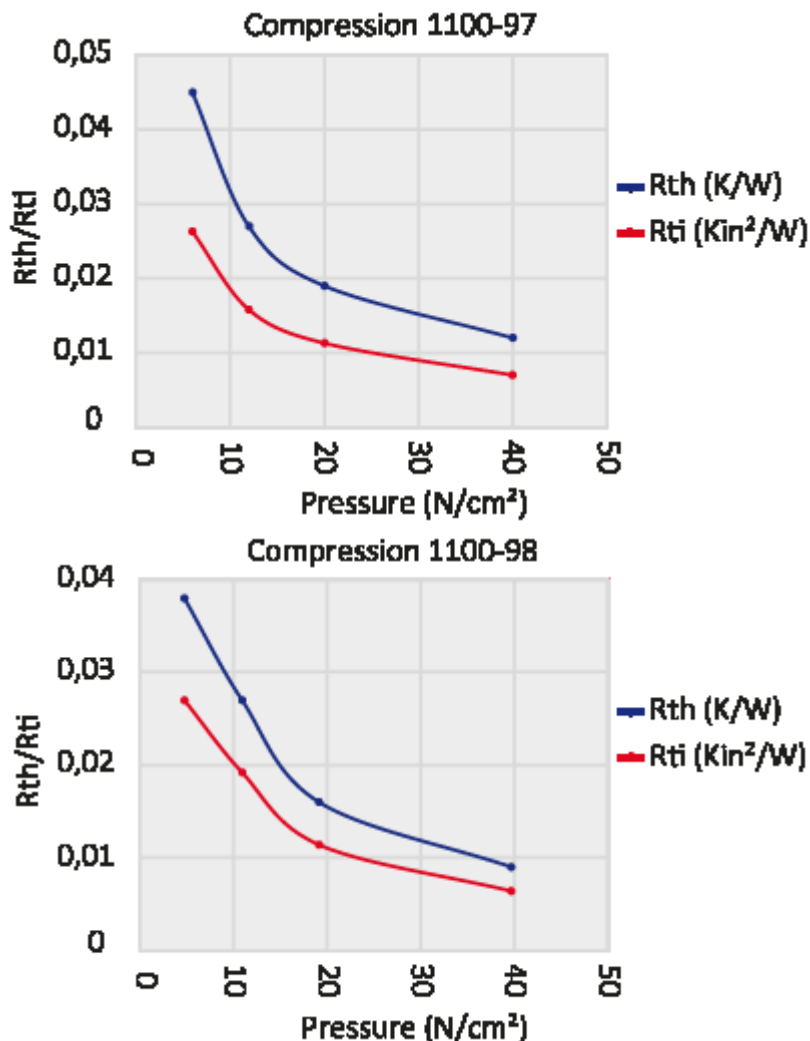


Thermal grease

### Comparison of thermal resistance 0,02 (in relation with contact pressure)



## 1100 - Thermal grease



1100-97 is a ceramic-filled single-component silicone with high thermal conductivity. The non-crosslinked thermal compounds do not dry out and the silicone components do not leak out of the compound.

### Silicone-free version

The silicone-free Thermal compound 1100-12 consists of synthetic, thermal polymer and is suitable for fast and effective heat dissipation. This paste is particularly suitable for silicone-sensitive applications. Its long-term stability guarantees full functionality during the entire lifetime of the product. Under normal application conditions the 1100-12 silicone-free compound will not cure, dry out, or melt.

### Storage

Special storage is not required for our Thermal grease, so it can be stored under normal climate conditions for up to 12 months. If any separation of the filler materials is noted, the 1100 Series must be mixed thoroughly before use.

### Thermal resistance in relation to contact pressure

## 1100 - Thermal grease

| Contact pressure (N/cm) | Thermal resistance (K/W) |         |         |         |
|-------------------------|--------------------------|---------|---------|---------|
|                         | 1100-12                  | 1100-96 | 1100-97 | 1100-98 |
| 10                      | 0.055                    | 0.065   | 0.032   | 0.035   |
| 15                      | 0.040                    | 0.055   | 0.023   | 0.020   |
| 20                      | 0.015                    | 0.050   | 0.019   | 0.015   |
| 25                      | 0.008                    | 0.048   | 0.018   | 0.014   |
| 30                      | 0.007                    | 0.045   | 0.015   | 0.013   |
| 35                      | 0.006                    | 0.042   | 0.013   | 0.011   |
| 40                      | 0.005                    | 0.038   | 0.012   | 0.010   |

*These values are measured under laboratory conditions.  
In other situations results may differ; please read our Guarantee.*

### Properties per part number

| Properties                                                                                                                  | Unit  | 1100-12      | 1100-96     | 1100-97     | 1100-98     |
|-----------------------------------------------------------------------------------------------------------------------------|-------|--------------|-------------|-------------|-------------|
| Colour                                                                                                                      |       | Silver       | Dark white  | White       | Grey        |
| Compound                                                                                                                    |       | soft / pasty |             |             |             |
| Thermal properties                                                                                                          |       |              |             |             |             |
| Thermal resistance Rth                                                                                                      | K/W   | 0.006        | 0.038       | 0.012       | 0.01        |
| Thermal impedance Rti                                                                                                       | Cmm/W | 2.2          | 11          | 4.5         | 4.1         |
|                                                                                                                             | KIN/W | 0.0033       | 0.017       | 0.007       | 0.0064      |
| Thermal conductivity                                                                                                        | W/mK  | 10           | 2.4         | 5           | 6           |
| Electrical properties                                                                                                       |       |              |             |             |             |
| Electrical conductivity<br>(according to DIN 51412-1)                                                                       | pS/m  | 53           | 8           | 0           | 0           |
| Mechanical properties                                                                                                       |       |              |             |             |             |
| Measured thickness (+/- 10%)                                                                                                | mm    | 0.25         | 0.025       | 0.025       | 0.025       |
| Physical properties                                                                                                         |       |              |             |             |             |
| Application temperature                                                                                                     | C     | -            | -60 to +150 | -60 to +150 | -60 to +150 |
| Density                                                                                                                     | g/cm  | 1.4          | 2.6         | 2.1         | 2.2         |
| Viscosity*                                                                                                                  | Pas   | 30 - 60      | 25 - 35     | 70 - 110    | 110 - 150   |
| Total mass loss (TML)                                                                                                       | Ma.-% | 0.1          | 1.4         | 1.3         | 1.5         |
| Possible thickness                                                                                                          | mm    | -            | Variable    | Variable    | Variable    |
| Long-term stability (1000 h / 85C / 85% relative humidity)                                                                  |       |              |             |             |             |
| Thermal resistance 1000h                                                                                                    | K/W   | 0.006        | 0.038       | 0.012       | 0.008       |
| These values are measured under laboratory conditions.<br>In other situations results may differ; please read our Guarantee |       |              |             |             |             |

*These values are measured under laboratory conditions.  
In other situations results may differ; please read our Guarantee.*

\*Shear rate 4s-1 / 25C

| Series | Type                                                                                                                   |
|--------|------------------------------------------------------------------------------------------------------------------------|
| 1100   | <div> <div>Select an option:</div> <div> 12 : Silver<br/> 96 : Dark white<br/> 97 : White<br/> 98 : Grey </div> </div> |