

BONDED THERMOCOUPLE WAFER ASSEMBLIES

Thermo Electric designs and manufactures temperature measurement solutions that are guaranteed to give you sensitivity, fast response, and consistent accuracy with greatest sensor to sensor uniformity. Thermo Electric is committed to deliver its innovative instrumented wafer solutions on time with a world class technical service.

PRODUCT TEMPERATURE RANGES

- -150 to 700°C

THERMOCOUPLE CALIBRATION (ACCURACY)

- **Type K:** ($\pm 1.1^\circ\text{C}$ or 0.4%) Range: -270 to 1,372°C
- **Type N:** ($\pm 1.1^\circ\text{C}$ or 0.4%) Range: -270 to 1,300°C
- **Type E:** ($\pm 1.0^\circ\text{C}$ or 0.4%) Range: -270 to 1,000°C
- **Type R/S:** ($\pm 1.5^\circ\text{C}$ or 0.25%) Range: -50 to 1,768°C

SPECIFICATIONS

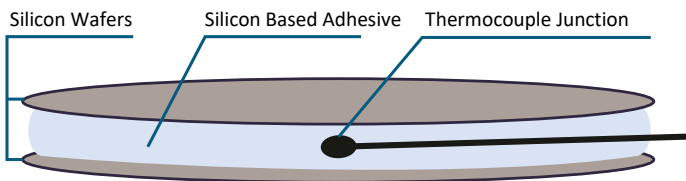
Sensor Leads

30 & 36 gauge, up to 40 feet long

Insulations Available

- Quartz
- Teflon
- Silica
- Ceramic
- Polyimide

TERMINATIONS



Substrates

Silicon, AlTiC, Glass, Ceramic and other supplied bare, coated, or patterned substrates. Other custom substrates, shapes, and sizes available

Substrate Sizes Offered

100mm, 125mm, 150mm, 200mm and 300mm

Feedthrough

Polyimide flat cable with seal under O-ring, atmosphere to 10^{-7} Torr capable. Length designated by customer.



| SPECIFICATIONS | | |
|----------------|---------------------|---------------------|
| Wire Gauge | 36 AWG | 30 AWG |
| Standard Gap | 0.150mm | 0.300mm |
| Planarity | +/- 1% STANDARD GAP | +/- 1% STANDARD GAP |
| PAIR THICKNESS | | |
| 100mm | 1.050mm +/- 0.050 | 2.850mm +/- 0.075 |
| 125mm | 1.250mm +/- 0.050 | 3.050mm +/- 0.075 |
| 150mm | 1.350mm +/- 0.050 | 3.150mm +/- 0.075 |
| 200mm | 1.450mm +/- 0.050 | 3.250mm +/- 0.075 |
| 300mm | 1.550mm +/- 0.050 | 3.350mm +/- 0.075 |