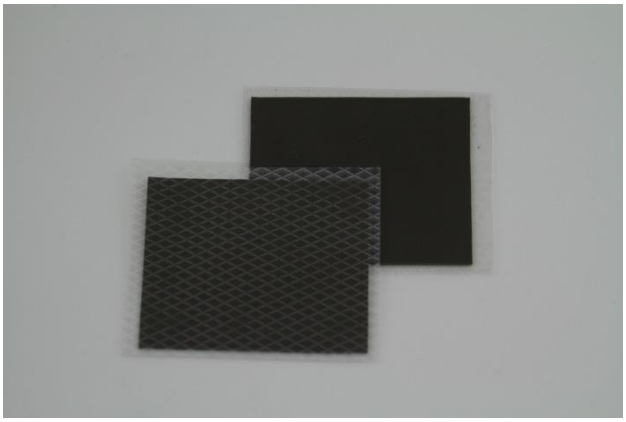
# INSULATORS
## TCIN-SERIES 5,0 W/m*K

**Thermally conductive insulators** are characterized by a good heat conduction and an excellent dielectric strength. They also possess a good electrical isolation.

Insulators are especially suitable for applications where low mounting pressure is required, e. g. for component clamping.

The smooth and compliant surface of insulators can minimize the thermal resistance and thus maximize the thermal performance.

- Thermal conductivity: 5,0 W/m*K
- Available in thicknesses from 0,4 to 10,0 mm
- Low thermal resistance with high voltage isolation
- Good electrical isolating
- Easy to assemble
- Cost effective



RoHS ✓ REACH ✓ UL 94

## PRODUCT SPECIFICATIONS

| PROPERTY | VALUE / TOLERANCE | TEST METHOD |
|---|---|---|
| Base material | Filled silicone elastomer | - |
| Thermal conductivity | 5,0 W/m*K | ASTM D5470 |
| Thickness range (T) | 0,4 – 10,0 mm ± 10% | ASTM D374 |
| Standard sheet size | 400 x 300 mm | - |
| Reinforced carrier | Fiberglass | - |
| Hardness | 45 Shore 00 ± 10 | ASTM D2240 |
| Density | 3,1 g/cm³ | - |
| Dielectric constant | 12,6 | ASTM D150 |
| Volume resistivity | $10^{13}$ Ω*cm | ASTM D257 |
| Dielectric strength | >10 kV/mm | ASTM D149 |
| Tensile strength | 44 MPa | ASTM D412 |
| Temperature range | -40 – 200 °C | - |
| Flammability rating | V-0 | UL94 |
| Total mass loss (TML) | < 0,5% @ 24 h / 125°C vakuum | ASTM E595-15 |

Please note: Picture only shows an example of an insulator.

## BUILDING AN ITEM NUMBER

**TCIN-5,0 S45 F-LxWxT-XXX-YYY**

| | |
|---|---|
| Thermally Conductive Insulator | |
| Thermal conductivity | |
| Shore 00 hardness | |
| Fiberglass reinforced | |
| xxx | Length (mm) |
| xxx | Width (mm) |
| xxx | Thickness (mm) |
| BNT | Both sides non-tacky |
| SAN | One side adhesive, one side non-tacky |
| BSA | Both sides adhesive |
| SST | One side tacky, one side non-tacky |
| DST | Die-cut parts |
| KCT | Kiss-cut parts |

### Standard options

EXAMPLE

**TCIN-5,0 S45 F-35x17x0,5-SAN-DST**
Thermally conductive insulator; thermal conductivity: 5,0 W/m*K; hardness: 45 Shore 00; fiberglass reinforced; size: 35x17 mm; thickness: 0,5 mm; one side adhesive, one side non-tacky; die-cut