

[IC Diamond Data Sheet](#)

IC Diamond 7 Carat Thermal Compound maximizes thermal heat transfer between the CPU core and heatsink by taking advantage of diamond's superior thermal conductivity.

Purified synthetic diamond has a thermal conductivity of 2,000-2,500 W/mK compared to 406-429 W/mK for pure silver.

Diamond's **five times better thermal conductivity compared to silver** makes it a superior heat transfer material for cooling high performance CPUs and is electrically non-conductive and non-capacitive.

Key Features

Each tube of IC Diamond Thermal grease contains 7 carats of micronized diamond with diamond particle loadings @ 92% by weight. Material loading above 90% is recommended as the best combination of rheological and thermal properties to minimize interface pump out due to thermal cycling.

- Superior bulk conductivity
- Excellent thermal impedance
- Tight particle distributions
- < 40 μ maximum particle diameter
- Silicone free
- Lower viscosity
- Greater stability
- Non capacitive or electrically conductive

Curing Time: IC Diamond requires minimal time to attain peak performance; in most cases, IC Diamond will reach peak performance after two hours of use. *

Stability: IC Diamond is designed for stability - it will not bleed or separate in normal use.

Key Specifications

Thermal Resistance: 0.25oC-cm²/W@ 100 μ BLT

Average Particle Size: <40 μ maximum particle diameter

Compliance: RoHS Compliant.

Note* Cure Time Assumes an optimized pressure of 50 PSI Lighter load pressures will increase cure times to a week or more

IC Diamond 7 - Pressure vs Thermal Resistance

