

4.3 W/mK – Highly thermally conductive, electrically insulative

5390 combines remarkable thermal conductivity with electrically insulative properties. Dark gray and self-leveling, this epoxy is ideal for electronics applications that require intense heat dissipation.

UNCURED	
Work Life	6 hours @ 25°C
Viscosity	Paste @ 25°C
Shelf Life	6 months @ -40°C 12 months @ -60°C
CURE OPTIONS	2 hours @ 80°C 1 hr @ 120°C
CURED PROPERTIES	Based on cure of 2 hours @ 80°C
Color	Dark Gray
Shore D Hardness	D/90/0
Glass Transition Temp (°C)	20
Density (g/cc)	3.14
Lap Shear 2024T3 Clad (psi)	1,130
Linear Shrinkage (%)	0.16
Tensile Strength (psi)	2960
Tensile Modulus (psi)	1,220,000
Compressive Strength (psi)	14,100
Compressive Modulus (psi)	835,000
Poisson's Ratio	0.45
UL 94	Meets V0 requirements
Extractable Ionics, ppm	Chloride: <0.1 Sodium: <0.5 Potassium: <0.1
ELECTRICAL PROPERTIES	Based on cure of 2 hours @ 80°C
Dielectric Constant	6.78 @ 1 MHz
Dissipation Factor	0.015 @ 1 MHz
Dielectric Strength (volts/mil)	430
Volume Resistivity (ohm-cm)	7.1E+13 @ 500 VDC
THERMAL PROPERTIES	Based on cure of 2 hours @ 80°C
CTE below Tg (ppm/°C)	20.9
CTE above Tg (ppm/°C)	44.3
Glass Transition Temp (°C)	20
Operating Temp. Range (°C)	-100 to 160
Thermal Conductivity (W/mK)	4.3
OUTGASSING PROPERTIES	Based on cure of 2 hours @ 80°C

KEY FEATURES

Very High Thermal Conductivity

Electrically Insulative

Meets NASA Outgassing Requirements

Ideal for Heat Sink Attach and Bonding

Injectable

Long Pot Life

Self Leveling

Solvent Resistant

✓ RoHS Compliant

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Rev C

2/27/2024

TML (%)	0.68
CVCM (%)	0.03
WVR (%)	0.03
ACOUSTIC PROPERTIES	
Velocity (m/s)	4,140
Impedance (MRayls)	12.986
Loss (dB/cm-MHz)	-8.92
Density (g/cc)	3.14