5390 Epoxy



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℃
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 lonics, 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
Volume Resistivity (ohm-cm) THERMAL PROPERTIES	7.1E+13 @ 500 VDC Based on cure of 2 hours @ 80°C
Volume Resistivity (ohm-cm) THERMAL PROPERTIES CTE below Tg (ppm/°C)	7.1E+13 @ 500 VDC Based on cure of 2 hours @ 80°C 20.9
Volume Resistivity (ohm-cm) THERMAL PROPERTIES CTE below Tg (ppm/°C) CTE above Tg (ppm/°C)	7.1E+13 @ 500 VDC Based on cure of 2 hours @ 80°C 20.9 44.3
Volume Resistivity (ohm-cm)THERMAL PROPERTIESCTE below Tg (ppm/°C)CTE above Tg (ppm/°C)Glass Transition Temp (°C)	7.1E+13 @ 500 VDC Based on cure of 2 hours @ 80°C 20.9 44.3 20
 Volume Resistivity (ohm-cm) THERMAL PROPERTIES CTE below Tg (ppm/°C) CTE above Tg (ppm/°C) Glass Transition Temp (°C) Operating Temp. Range (°C) 	7.1E+13 @ 500 VDC Based on cure of 2 hours @ 80°C 20.9 44.3 20 -100 to 160
Volume Resistivity (ohm-cm) THERMAL PROPERTIES CTE below Tg (ppm/°C) CTE above Tg (ppm/°C) Glass Transition Temp (°C) Operating Temp. Range (°C) Thermal Conductivity (W/mK)	7.1E+13 @ 500 VDC Based on cure of 2 hours @ 80°C 20.9 44.3 20 -100 to 160 4.3

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	
Chat with a specialist:	
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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 (MRayles)	12.986
Loss (dB/cm-MHz)	-8.92
Density (g/cc)	3.14