APPLI-TEC
ADVANCED THERMOSET SOLUTIONS

5051

Key Features

Bonds Well to Most Substrates
Free Flowing
Wicks Easily Into Tight Spaces
Long Work Life
Low Viscosity
Optically Clear
User-friendly Packaging

Product Description:

5051 is an optically clear, low viscosity, electrically isolating epoxy compound. It bonds well to most substrates such as metals, glass, ceramics, and most plastics.

Uncured

Work Life @ 25°C: 8 hours
Mixed Viscosity @ 25°C: 320 cPs
Pot Life @ 25°C: 4 hours
Shelf Life @ 25°C: 12 Months (2-part Kits)
Shelf Life @ -40°C: 12 Months (Cryo-Pac®)
Mix Ratio 100A : 34.5B Parts By Weight

Cure Options

6 hours @ 80° C
8 hours @ 65° C
8 days @ 25° C

Cured Properties

(Based on cure of 6 hours @ 80°C)

Color	Clear
Shore D Hardness	83
Glass Transition Temp (°C)	85
Lap Shear 2024T3 Clad (psi)	3,300
Density (g/cc)	1.15
Refractive Index	1.56
Shrinkage Linear (%)	0.2

Electrical Properties

(Based on cure of 6 hours @ 80°C)

Dielectric Constant	3.013 @ 60 Hz
Dielectric Constant	3.052 @ 1k Hz
Dielectric Constant	2.846 @ 100k Hz
Dissipation Factor	0.0061 @ 60 Hz
Dissipation Factor	0.0118 @ 1k Hz
Dissipation Factor	0.0382 @ 100k Hz
Volume Resistivity (ohm-cm)	1.7E 16 @ 500 VDC

Thermal Properties

(Based on cure of 6 hours @ 80°C)

Glass Transition Temp (°C)	85
Degradation Temp. (°C)	250

Outgassing Properties

(Based on cure of 6 hours @ 80°C)

TML (%)	0.58
CVCM (%)	0.01
WVR (%)	0.26

Acoustic Properties

(Based on cure of 6 hours @ 80°C)

Velocity (m/s)	2,645
Impedance (MRayles)	3.05
Loss (dB/cm-MHz)	-6.2
Density (g/cc)	1.15

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