EPOXIES
INNOVATIVE BONDING SOLUTIONS ETC.

TECHNICAL BULLETIN

50-3253FR
FLAME RETARDANT THERMALLY CONDUCTIVE EPOXY RESIN

DESCRIPTION:

50-3253FR Potting and Encapsulating Compound has been formulated to meet the stringent non-burning requirements of UL 94 V-0. This medium viscosity system offers high thermal conductivity, low shrinkage, low exotherm, and outstanding electrical insulation properties. The high thermal conductivity helps extend the life of assemblies by quickly dissipating heat away from critical components.

50-3253FR is designed for ease of use. It has a convenient 1:1 mix ratio. Typical applications for the 50-3253FR include potting and encapsulating power supplies, transformers, batteries, coils, insulators, sensors, etc. The 50-3253FR is an excellent choice for applications that require a flame retardant compound with high thermal conductivity.

FEATURES:

- Thermally conductive
- Easy 1:1 ratio
- Shock and vibration resistant
- Flame Retardant

BENEFITS:

- Protects electronics by quickly transferring heat
- Ideal for use with meter mix dispense equipment
- Will not damage electronic components
- Meets UL94V-0 non-burning requirements

TYPICAL SPECIFICATIONS:

Viscosity @ 25°C cps	
Resin	60,000
Hardener	64,000
Mixed	60,000
Color	
Resin	Black
Hardener	Beige
Mixed	Black
Specific Gravity, 25°C	
Resin	1.6
Hardener	1.49
Pot Life, 100 grams, 25°C, minutes	100
Hardness, Shore D	
@ 25°C	80D
@ 75°C	55D
Dielectric Constant, 25°C, 100 Hz	5.0
Dielectric Strength, V/mil	485
Volume Resistivity, ohm-cm, 25°C	7.6×10^{13}
Thermal Conductivity, W/m- °K	2.16
Operating Temperature, °C	-65 to +155

Continued

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INSTRUCTIONS FOR USE:

1) The 50-3253FR Epoxy and 50-3253FR hardener contain fillers. Both components should be mixed well prior to use to ensure fillers are uniformly dispersed. The 50-3253FR Resin can be warmed to 40°C to lower viscosity and promote better flow.

2) Mix equal parts resin to hardener by weight.

3) To ensure void free castings material can be vacuum degassed.

4) Pour and cure according to one of the following cure schedules:

25°C	24-48 Hours
65°C	2-3 Hours
100°C	30 Minutes

IMPORTANT:

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