

EPOXY 021906-1T

HIGH THERMAL K EPOXY ENCAPSULANT

TECHNICAL DATA

July, 2010

Product Description

Epoxy 021906-1T is a room temperature curing 2 part epoxy system designed to be used to encapsulate electronic packages. This product has been formulated so as to provide the user with an easy to work with 1:1 by volume mix ratio. Once encapsulated with the Epoxy 021906-1T an electronic package will exhibit a higher resistance to both physical shock as well as exposure to water and other potentially harmful chemicals.

APPLICATIONS	FEATURES	RECOMMENDED SUBSTRATES	BIOCOMPATIBILITY
<ul style="list-style-type: none"> Electronic Encapsulation 	<ul style="list-style-type: none"> Two part convenient mix ratio Room temperature cure Moisture resistant Chemical resistance Physical Shock resistant 		

UNCURED PROPERTIES*		
Property	Value	Test Method
Solvent Content	No Nonreactive Solvents	N/A
Chemical Class, PT A:B	Epoxy : Amine	N/A
Color, PT A:B	Black : Light Grey	N/A
Viscosity @ 25C, 20rpm, cps PT A:B	30,000 : 70,000	ASTM D1084
Viscosity @ 25C, 50rpm, cps, PT B	52,000	ASTM D1084
Specific Gravity, PT A:B	2.35 : 1.57	N/A
Filler Base	Tabular Alumina	N/A

CURED MECHANICAL PROPERTIES*		
Property	Value	Test Method
Durometer Hardness, Shore D	55-65	ASTM D2240
Moisture Resistance	Excellent	N/A
CTE, C, -40 to 80C, ppm	38	ASTM D696
Peak Intermittent Temperature, C	180	N/A
Thermal Conductivity, BTU in/hr-ft ² , F	9	ASTM D2214
Thermal Conductivity, W/Meter, K	1.29	ASTM D2214
Comparative Tracking Index, volts	>175	IEC 60112
Dielectric Strength, Volt/mil	>500	ASTM D149
Dissipation Factor, 1KHz	0.0024	ASTM D150
Operational Temperature Range, C	-50 to 155	N/A

CURE OVERVIEW*		
Property	Value	Test Method
Mix ratio by Volume, PT A:B	1:1	N/A
Mix ratio by Weight, PT A:B	150:100 **	N/A
Work Life @ room temperature, min	60	N/A
Cure Time @ room temperature, hrs	24-48	N/A
Cure Time @ 65C, min	120	N/A

** Acceptable mix ratio range by weight: 90-110 parts Hardener to every 150 parts Resin.

Storage:

Epoxy 021906-1T has a 12 month shelf life when stored in closed containers. Refer to packaging specific quote for shelf-life information.

Revision Number: 1-New Date: 19 July, 2010

Resin Designs, LLC 11 State Street Woburn, MA 01801 www.resindesigns.com P 781-935-3133 F 781-935-3144

Resin Designs, LLC makes no express or implied warranties or merchantability, fitness or otherwise with respect to this product. In addition, while the information contained herein is believed to be reliable, no warranty is express or implied regarding the accuracy of the results to be obtained from the use thereof. The properties given are typical values and are not intended for use in preparing specifications. User should make their own test to determine the suitability of this product for their own purposes.