

REWORKABLE CSP and BGA UNDERFILL ENCAPSULANT

CN-1728 is a reworkable underfill encapsulant for CSP and BGA encapsulation that cures quickly at low temperature. It is capable of flowing quickly across distances of 750 mils and greater. This encapsulant exhibits excellent adhesion to organic substrates.

TYPICAL PROPERTIES

Color	Cloudy Yellow
Ash Content, wt%	0
Viscosity (cps)	
SSA #21, 100 RPM, 25°C	900
Cure Conditions, minutes	
130°C	2-10
150°C	1-6
<i>*Cure conditions are dependent on compatibility with flux.</i>	
<i>Consult with Zymet technical service to determine exact conditions.</i>	
Specific Gravity	1.13
Shelf Life @ -5°C, months	6
Pot Life @ 25°C, days	14

CURED PROPERTIES

CTE, ppm/°C	64
Tg, °C	70
Shear Storage Modulus, GPa	1.1
Volatiles Content, wt% loss on cure	<2.0

DIRECTIONS FOR USE

Underfill flow can be performed at room temperature, but preheating the board up to 70°C increases the flow rate. 50-60°C is typical. Dispense encapsulant along one edge or two adjacent edges of the component. The temperature of cure is the actual temperature of the encapsulant.

DIRECTIONS FOR REWORK

Heat fillets to 170-180°C and remove. Heat component to 240-250°C and lift component to remove. Avoid using excessive time, more than 40 seconds, or excessive temperature. Remove solder and underfill residue concurrently at 240-250°C. Avoid using excessively high temperature. For example avoid contact with very hot soldering iron tip. Alternatively, collapse the solder with hot air and flux, then remove underfill residue at 170-180°C. For more detailed instructions, contact your Zymet sales representative.

STORAGE AND HANDLING

Store at -5°C or below. Thaw packages slowly, to room temperature, before opening and use. Refer to MSDS before use or disposal.

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