

275-55

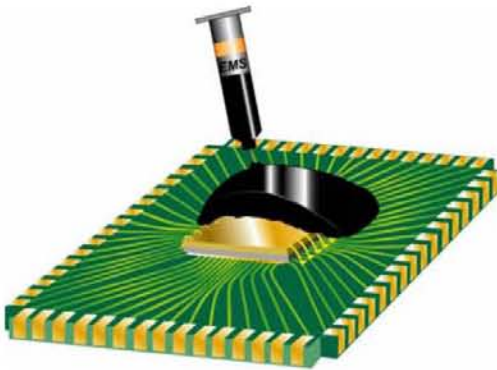
Fast Cure, Reworkable Underfill



- ◆ Low temperature cure
- ◆ High temperature rework
- ◆ Excellent flow properties

Advantages

The 275-55 is a low viscosity reworkable underfill that cures rapidly at 120 °C. Though it exhibits excellent adhesion, the 275-55 exhibits exceptional reworkability properties at high temperatures.



Cure Characteristics	
Standard convection batch oven	
3-4 minutes	120 °C
1-2 minutes	150 °C

Handling Characteristics	
Viscosity, DV-II+, SSA #5	
10.0 rpm	4200cps
Specific gravity	1.2
Color	Amber
Shelf life at 25 °C	48 hours
Shelf life at 0°C (sealed container)	6 months
Shelf life at -40°C (sealed container)	12 months

User Instructions

Storage: Elevated temperatures reduce working life. Do not store above 0 °C.

Application: Since oven ramp times vary, it is important that the adhesive be exposed to the recommended cure temperature for the recommended time. The cure requirements do not include ramp times to achieve the required temperature. Most often 5-20 minutes is necessary to achieve the cure temperature.

Disclaimer

EMS, Inc. technical data sheets are derived from the material's typical properties and are intended as a reference only. The data contained herein is not intended for product specifications.

275-55 Fast Cure Underfill

Physical Properties	
Glass transition temperature (DSC - inflection)	95 °C
CTE (below Tg)	80 ppm/°C
CTE (above Tg)	240 ppm /°C
Elastic modulus, 25 °C	1.4 GPa
Hardness, Shore D	85
Operating Temperature Range	-60°C to 175°C
Degradation Temperature	>350°C
% Solids	100%
Moisture Absorption, 2 hour Water Boil	<2.0%

Electrical and Thermal Properties	
Volume Resistivity	$2 \times 10^{15} \Omega \cdot \text{cm}$
Dissipation Factor, 100KHz	0.004
Dielectric Constant, 100KHz	3.2
Ionic Properties (hydrolyzable ions)	
Chloride	<5 ppm
Sodium	<5 ppm
Potassium	<5 ppm
Ammonium	<5 ppm



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ISO 9001/QS-9000 Certified

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