TECHNICAL DATA SHEET



PVIC[®] ACE34030

ELECTRICALLY CONDUCTIVE OVEN CURE DIE ATTACH ADHESIVE

Description

PVIC® ACE34030 electrically conductive die attach adhesive is designed for high reliability semiconductor or LED packaging application. This high purity adhesive has been engineered for use in high throughput in-line die attach oven cure and its superb rheology allows minimum adhesive dispense and die placement times along with no tailing & stringing phenomenon during dispense. It also exhibits less void and resin bleed out with significant bond strength in the high temperature and humidity condition.

Application Package

TSOP, QFP, DIP & LED etc

Features

Single component Excellent dispensability Low volume resistivity Minimal resin bleed and low volatiles

Filler type	Silver
Resin	Ероху
Cure Condition	At 175°C for 30 min
Work life @ 25°C	> 24 hours
Estimated Storage life at -40°C	1 year 6 months (alternate storage life under -20°C)

Properties

TEST ITEMS	STANDARD	TEST METHOD
Viscosity @ 25°C	8,700cps @ 5.0 rpm	BHS-K-108
Thixotropic Index	5.2	BHS-K-108
DSC	Onset 137°C Peak 150°C	BHS-K-113
Volume Resistivity	0.000175 ohm-cm	BHS-K-110
Die Shear Strength @ RT (50×58mil ²) (Si to Ag plated L/F) @ 250°C(250×250mil ²) (Si to Ag plated L/F)	>10 kg 3.3 kg	BHS-K-109
Hot/wet die shear strength $(85 \degree C/85\%/24hr)$ @ 250°C(250×250mil ²) (Si to Ag plated L/F)	0.4 kg	
Weight loss on cure	1.90 Wt.%	BHS-K-111
Glass Transition Temp. (Tg) by DMA	74 °C	BHS-K-116
TMA (Coefficient of thermal expansion)	a1 35 ppm a2 147 ppm	BHS-K-117
Modulus 25°C 100°C 250°C	805 MPa35 MPa22 MPa	BHS-K-118
Ionic impurity Chloride Sodium Potassium Thermal conductivity (W/m.k)	 ≤ 15 ppm ≤ 10 ppm ≤ 10 ppm 3.61 W 	BHS-K-104

Instruction

Thawing

Place the container to stand vertically for $30\min - 1$ hour. **DO NOT** open the container before adhesive reaches ambient temperature to prevent the moisture condensation. Any moisture that collects on the thawed container should be removed prior to use. Adhesives that appear to have separated should not be used.

Storage

Adhesive should be stored @ -40° C or colder. The shelf life of the material is only valid when the material has been stored at the correct storage condition.

Availability

PVIC adhesives are packaged in syringes or pots per customer specification. For the details, please contact our Customer Service or sales department.

The figures shown above are typical values only. If you need to generate a specification, please request our Standard Release Specification.