

Date: May 2013
Rev: IV
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 1.13
Pot Life: 28 Days
Shelf Life: One year at -40°C

Recommended Cure: 180°C / 1 Hour

NOTE: Container(s) should be kept closed when not in use. Filled systems should be stirred thoroughly before mixing and prior to use.

Product Description: EPO-TEK[®] E3035T-2 is a single component, silver-filled epoxy for semiconductor die attach, as well as SMD attach on hybrid circuits.

Typical Properties:

To be used as a guide only, not as a specification. Different batches, conditions & applications yield differing results.

*Cure condition: 180°C / 1 Hour * denotes test on lot acceptance basis Data below is not guaranteed.*

PHYSICAL PROPERTIES:

* Color (before cure):	Silver		
* Consistency	Thixotropic paste		
* Viscosity (23°C): @ 2.5 rpm	80,000 - 120,000 cPs		
Thixotropic Index:	4.09		
* Glass Transition Temp:	≥ 100 °C (Dynamic Cure:20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min)		
Coefficient of Thermal Expansion (CTE):			
Below Tg:	42 x 10 ⁻⁶ in/in°C		
Above Tg:	80 x 10 ⁻⁶ in/in°C		
Shore D Hardness:	85		
Lap Shear @ 23°C:	1,776		
Die Shear @ 23°C:	≥ 10 Kg	3,400	psi
Degradation Temp:	390 °C		
Weight Loss:	@ 200°C	0.15 %	
	@ 250°C	0.29 %	
	@ 300°C	0.32 %	
OperatingTemp:	: Continuous:	- 55°C to 200°C	
	Intermittent:	- 55°C to 300°C	
Storage Modulus:	369,338 psi		
Ion Content:	Cl:	62 ppm	NA ⁺ : 21 ppm
	NH ₄ ⁺ :	24 ppm	K ⁺ : 3 ppm
* Particle Size:	≤ 20 microns		

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	1.44 W/mK
* Volume Resistivity @ 23°C:	≤ 0.0005 Ohm-cm

Epoxyes and Adhesives for Demanding Applications™

This information is based on data and tests believed to be accurate. Epoxy Technology, Inc. makes no warranties (expressed or implied) as to its accuracy and assumes no liability in connection with any use of this product.

EPOXY TECHNOLOGY, INC.

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www.epotek.com

EPO-TEK[®] E3035T-2 Advantages & Suggested Application Notes:

- This epoxy can be classified as a higher viscosity version of EPO-TEK[®] E3035, suggested for the following purposes:
 - ◇ Used for improved stencil printing via small apertures.
 - ◇ Less flow-out between small pads like 0402 or 0603 caps and resistors.
- Performs exceptionally well as a die attach for small chips such as GaAs, LEDs and diodes.
- Capable of resisting 260°C green reflow process, low outgassing in hermetic lid-seal processes near 300°C and organic burn-in up to 150°C/1000 hours storage.
- Low levels of water extractable monovalent ions such as Chlorides.
- Capable of JEDEC Level II die-attach packaging on die-paddles and lead-frames.
- Widely used epoxy; popular choice for silver-filled epoxies; opto-packaging, hybrids, and many types of substrates including kovar, ceramic and BT.
- Contact techserv@epotek.com for your best recommendation. Alternate viscosities and lower curing temperatures are available.

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