

EPO-TEK® E3001

Epoxy; Epoxide

Epoxy Technology Inc.

Message:

EPO-TEK® E3001 is a one component, silver-filled, electrically conductive epoxy designed for semiconductor die attach applications using a snap-cure profile.

General Information			
Filler / Reinforcement	Silver		
Features	Electrically Conductive		
Uses	Bonding		
	Electrical/Electronic Applications		
	LEDs		
	Printed Circuit Boards		
Agency Ratings	EC 1907/2006 (REACH)		
	EU 2003/11/EC		
	EU 2006/122/EC		
RoHS Compliance	RoHS Compliant		
Forms	Paste		
Physical	Nominal Value	Unit	
Particle Size	< 45.0	µm	
Degradation Temperature	428	°C	TGA
Die Shear Strength - >5 kg (23°C)	11.7	MPa	
Operating Temperature			
Continuous	-55 to 200	°C	
Intermittent	-55 to 300	°C	
Storage Modulus (23°C)	2.59	GPa	
Thixotropic Index	2.70		
Weight Loss on Heating			
200°C	0.040	%	
300°C	0.22	%	
Thermal	Nominal Value	Unit	
Glass Transition Temperature ¹	> 90.0	°C	
CLTE - Flow			
-- ²	5.0E-5	cm/cm/°C	
-- ³	1.2E-4	cm/cm/°C	
Thermal Conductivity	0.93	W/m/K	
Thermoset	Nominal Value	Unit	Test Method

Shelf Life (-40°C)	52	wk	
Uncured Properties	Nominal Value	Unit	Test Method
Color	Silver		
Density	2.75	g/cm ³	
Viscosity ⁴ (23°C)	2.0 to 4.1	Pa·s	
Curing Time (150°C)	1.0	hr	
Pot Life	1400	min	
Cured Properties	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	78		
Lap Shear Strength (23°C)	9.59	MPa	
Volume Resistivity			
23°C	< 5.0E-4	ohms·cm	
23°C ⁵	7.0E-4	ohms·cm	
NOTE			
1.	Dynamic Cure 20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min		
2.	Below Tg		
3.	Above Tg		
4.	100 rpm		
5.	200°C/2 min cure		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

