EPO-TEK® H44

Epoxy; Epoxide

Epoxy Technology Inc.

Message:

EPO-TEK® H44 is a single component, gold-filled, electrically conductive epoxy adhesive designed for hybrid microelectronic packaging.

General Information	
Filler / Reinforcement	Gold
Features	Electrically Conductive High Viscosity Low to No Outgassing
Uses	Adhesives Aerospace Applications Electrical/Electronic Applications Medical/Healthcare Applications
Agency Ratings	ASTM E 595 EC 1907/2006 (REACH) EU 2003/11/EC EU 2006/122/EC
RoHS Compliance	RoHS Compliant
Forms	Paste

Physical	Nominal Value	Unit	
Particle Size	< 50.0	µm	
Degradation Temperature	388	°C	TGA
Die Shear Strength - >10 kg (23°C)	23.4	MPa	
Operating Temperature			
Continuous	-55 to 200	°C	
Intermittent	-55 to 300	°C	
Weight Loss on Heating (300°C)	0.060	%	

Thermal	Nominal Value	Unit
Glass Transition Temperature [1]	> 100	°C

Thermoset	Nominal Value	Unit	Test Method
Shelf Life (23°C)	26	wk	

Uncured Properties	Nominal Value	Unit	Test Method
Color	Brown		
Viscosity [2] (23°C)	> 820	Pa·s	
Curing Time (150°C)	1.0	hr	

Cured Properties	Nominal Value	Unit	Test Method
Volume Resistivity (23°C)	< 5.0E-4	ohms·cm	
NOTE			
1.	Dynamic Cure 20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min		
2.	0.5 rpm		