EPO-TEK® H81A

Epoxy; Epoxide

Epoxy Technology Inc.

Message:

A two component, gold-filled, electrically and thermally conductive epoxy designed for hybrid microelectronic and semiconductor packaging.

General Information	
Filler / Reinforcement	Gold
Features	Electrically Conductive Thermally Conductive
Uses	Electrical/Electronic Applications
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	< 50.0	µm
Degradation Temperature	412	°C
Die Shear Strength - >5 kg (23°C)	> 11.7	MPa
Operating Temperature		
Continuous	-55 to 250	°C
Intermittent	-55 to 350	°C
Weight Loss on Heating		
200°C	< 0.050	%
250°C	0.070	%
300°C	0.16	%

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

Thermoset	Nominal Value	Unit
Thermoset Components		
Part A	Mix Ratio by Weight: 6.0	
Part B	Mix Ratio by Weight: 1.0	
Shelf Life (23°C)	52	wk

Uncured Properties	Nominal Value	Unit
Color		
-- [2]	Brown	
-- [3]	Brown	

Density		
Part B	5.61	g/cm^3
Part A	5.79	g/cm^3
Viscosity [4] (23°C)	250 to 300	Pa·s
Curing Time (150°C)	1.0	hr
Pot Life	2900	min

Cured Properties	Nominal Value	Unit
Volume Resistivity (23°C)	< 9.0E-4	ohms·cm

NOTE	
1.	Dynamic Cure 20-200°C/ISO 25 Min; Ramp -10-200°C @ 20°C/Min
2.	Part B
3.	Part A
4.	0.5 rpm