Preliminary Product Information Sheet

EPO-TEK® H67MP-GB

Note: These are typical properties to be used as a guide only, not a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results.

Date: September 2017
Rev: III
No. of Components: Single
Mix Ratio by Weight: N/A
Specific Gravity: 2.00
Pot Life: 28 Days
Shelf Life- Bulk: One year at -40°C

Recommended Cure: 150°C / 1 Hour

NOTES:
- Container(s) should be kept closed when not in use.
- Filled systems should be stirred thoroughly before mixing and prior to use.
- Performance properties (rheology, conductivity, others) of the product may vary from those stated on the data sheet when bi-pak/syringe packaging or post-processing of any kind is performed. Epoxy's warranties shall not apply to any products that have been reprocessed or repackaged from Epoxy's delivered status/container into any other containers of any kind, including but not limited to syringes, bi-paks, cartridges, pouches, tubes, capsules, films or other packages.

Product Description: A single component, thermally conductive, electrically insulating epoxy which complies with the requirements of MIL-STD-883/Test Method 5011 for hybrid microelectronic packaging and assemblies. It maybe used for bonding SMDs, die-attach, substrate-attach or general heat sinking. It is a version of EPO-TEK® H67MP which contains 2 mil glass beads.

MATERIAL CHARACTERISTICS*:

PHYSICAL PROPERTIES:		Cure condition: 150°C / 1 Hour			
Color (before cure):		White			
Consistency:		Highly viscous paste			
Viscosity (23°C) @ 1 rpm:		334,200	cPs		
Thixotropic Index:		N/A			
Glass Transition Temp:		93	°C (Dynamic Cure: 20-300°C/ISO 25 Min; Ramp -10-200°C @20°C/Min)		
Coefficient of Thermal Expansion (CTE):					
	Below Tg:	17	x 10^{-6} in/in°C		
	Above Tg:	75	x 10^{-6} in/in°C		
Shore D Hardness:		86			
Lap Shear @ 23°C:		> 2,000	psi		
Die Shear @ 23°C:		34	Kg		
Degradation Temp:		360	°C		
Weight Loss:					
	@ 200°C:	0.29	%		
	@ 250°C:	0.79	%		
	@ 300°C:	1.62	%		
Suggested Operating Temperature:		< 300	°C (Intermittent)		
Storage Modulus:		852,310	psi		
Ion Content:		Cl^-: < 200 ppm	Na^+:	< 50 ppm	
		NH_4^+: 44 ppm	K^+:	< 50 ppm	
Particle Size:		≤ 55	microns		

ELECTRICAL AND THERMAL PROPERTIES:		
Thermal Conductivity:	0.4	W/mK
Volume Resistivity @ 23°C:	≥ 2 x 10^{13}	Ohm-cm
Dielectric Constant (1KHz):	5.01	
Dissipation Factor (1KHz):	0.0045	

The data above is INITIAL only - it may be changed at any time, for any reason without notice to anyone. It is provided only as a guide for evaluation/consideration.

* These material characteristics are typical properties that are based on a limited number of samples/batches. All properties are based on the cure indicated above. Some properties may vary as manufactured quantities are scaled up to commercialized production levels.

EPOXY TECHNOLOGY, INC.
14 FORTUNE DRIVE, BILLERICA, MA 01821 (978) 667-3805, FAX (978) 663-9782
www.epotek.com