

Product Information Sheet

MATERIAL ID:

EPO-TEK® GE120

Date: 08/2007

Per:

Rev: II

Material Description:

A single component, thixotropic, electrically and thermally insulating epoxy adhesive designed for bonding SMDs to the PCB. It can be used for electronic assembly in many devices including consumer electronics, cell phone, telecommunications, medical, automotive, and scientific/OEM. It is a blue color version of EPO-TEK® 115-SMT.

Number of Components:

Single

Mix Ratio by weight:

N/A

Cure Schedule (minimum)

150°C/5 Minutes - 120°C/15 Minutes

Specific Gravity:

1.15 --- Part A: Part B:

Pot Life:

28 Days

Shelf Life:

One year at -40°C / 28 days @ 23°C

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

MATERIAL CHARACTERISTICS: *To be used as a guide only, not as a specification. Data below is not guaranteed. Different batches, conditions and applications yield differing results; Cure condition: 150°C/1 hour*
* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

*Color (before cure):	Blue	Die Shear @ 23°C:	≥ 5 Kg / 1,700 psi
*Consistency:	Smooth thixotropic paste	Degradation Temp:	344 °C
*Viscosity (23°C):		Weight Loss:	
@ 1 rpm	200,000 - 300,000 cPs	@ 200°C:	0.27 %
Thixotropic Index:	N/A	@ 250°C:	1.12 %
*Glass Transition Temp:	≥ 65 °C (Dynamic Cure 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)	@ 300°C:	2.96 %
Coefficient of Thermal Expansion (CTE):		Operating Temp:	
Below Tg:	41 x 10 ⁻⁶ in/in°C	Continuous:	- 55°C to + 175°C
Above Tg:	218 x 10 ⁻⁶ in/in°C	Intermittent:	- 55°C to + 275°C
Shore D Hardness:	80	Storage Modulus @ 23°C:	438,637 psi
Lap Shear @ 23°C:	1,568 psi	*Particle Size:	≤ 20 microns

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	N/A	Dielectric Constant (1KHz):	3.48
*Volume Resistivity @ 23°C:	≥ 7 x 10 ¹³ Ohm-cm	Dissipation Factor (1KHz):	0.007

OPTICAL PROPERTIES @ 23°C:

Spectral Transmission:	N/A	Index of Refraction:	N/A
-------------------------------	-----	-----------------------------	-----

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