

Product Information Sheet

MATERIAL ID: EPO-TEK® EJ2189-LV
Date: Jan 2012
Rev: V
Material Description: Low viscosity, two-component, room temperature curing conductive epoxy
Number of Components: Two
Mix Ratio by Weight: 10:1
Cure Schedule (minimum): 150°C/15 Minutes - 100°C/1 Hour - 80°C/3 Hours - 23°C/72 Hours
Specific Gravity: Part A: 3.07 Part B: 0.94
Pot Life: 4 Hours
Shelf Life: One year at room temperature

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: varies as required

* denotes test on lot acceptance basis

PHYSICAL PROPERTIES:

* Color (before cure):	Part A: Silver Part B: Amber		
* Consistency	Smooth flowing paste		
* Viscosity (23°C): @ 1 rpm	25,000 - 45,000 cPs		
Thixotropic Index:	3.3		
* Glass Transition Temp:	≥ 40 °C (Dynamic Cure: 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)		
Coefficient of Thermal Expansion (CTE):			
Below Tg:	52 x 10 ⁻⁶ in/in°C		
Above Tg:	89 x 10 ⁻⁶ in/in°C		
Shore D Hardness:	41		
Lap Shear @ 23°C:	1,336 psi		
Die Shear @ 23°C:	> 10 Kg	3,400 psi	
Degradation Temp:	340 °C		
Weight Loss:			
@ 200°C	0.34 %		
@ 250°C	0.80 %		
@ 300°C	1.58 %		
Operating Temp:			
Continuous:	- 55°C to	150 °C	
Intermittent:	- 55°C to	250 °C	
Storage Modulus:	213,672 psi		
Ion Content:			
Cl:	201 ppm	NA⁺:	27 ppm
NH₄⁺:	53 ppm	K⁺:	2 ppm
* Particle Size:	< 45 microns		

ELECTRICAL AND THERMAL PROPERTIES:

Thermal Conductivity:	2 W/mK
* Volume Resistivity @ 23°C (23°C/72 Hours):	≤ 0.009 Ohm-cm
* Volume Resistivity @ 23°C (80°C/3 Hours):	≤ 0.0005 Ohm-cm
* Volume Resistivity @ 23°C (150°C/1 Hour):	≤ 0.0005 Ohm-cm

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