

Product Information Sheet

MATERIAL ID: **EPO-TEK® EJ2189-LV**

Date: May 2014

Rev: VI

Material Description: Two component, low viscosity, room temperature curing, conductive epoxy.

Number of Components: Two

Mix Ratio by Weight: 10 : 1

Recommended Cure: 150°C/1 Hour

Specific Gravity: Part A: 3.07 Part B: 0.94

Pot Life: 4 Hours

Shelf Life: One year at room temperature

Minimum Alternative Cure(s): <i>may not achieve performance properties below:</i> 150°C / 15 Minutes 100°C / 1 Hour 80°C / 3 Hours 23°C / 72 Hours

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):	≤ 0.005 Ohm-cm
* Volume Resistivity @ 23°C (150°C/1 Hour):	≤ 0.0005 Ohm-cm
Volume Resistivity @ 23°C (25°C/40-60%RH/3 Day cure):	≥ 0.007 Ohm-cm

This information is based on data and tests believed to be accurate. Epoxy Technology, Inc. makes no warranties (expressed or implied) as to its accuracy and assumes no liability in connection with any use of this product.

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