

Number of Components:	Two	Minimum Bond Line Cure Schedule*:	
Mix Ratio By Weight:	10:1	150°C	15 Minutes
Specific Gravity:		100°C	1 Hour
Part A:	3.43	80°C	3 Hours
Part B:	0.94	23°C	3 Days
Pot Life:	4 Hours		
Shelf Life:	One year at room temperature		

Note: Container(s) should be kept closed when not in use. For filled systems, mix contents of each container (A & B) thoroughly before mixing the two together. \*Please see Applications Note available on our website.

### Product Description:

EPO-TEK® EJ2189 is an electrically conductive, silver-filled epoxy paste. This two component system is designed for low temperature curing from ambient to 80°C, although other heat cures can be used.

### EPO-TEK® EJ2189 Advantages & Application Notes:

- Ease of use: smooth flowing paste allows for automated dispensing, stamping, brushing, or hand applications.
- Suggested applications include: EMI and Rf shielding; ITO interconnects in LCDs; low temperature cryogenic cooling.
- Exhibits superior adhesion to a wide variety of substrates including most metals, ceramics, glass and plastics.
- Hybrid/micro-electronic adhesive including die-attach and substrate attach for Rf and Microwave devices.
- Provides a metallic-like layer after cure.

**Typical Properties:** *To be used as a guide only, not as a specification. Different batches, conditions & applications yield differing results. Cure condition: varies as required \* denotes test on lot acceptance basis Data below is not guaranteed.*

Post-processing / special packaging can vary the performance properties (e.g., Viscosity, Conductivity) from those stated below.

Physical Properties:	
*Color: Part A: Silver Part B: Amber	Weight Loss:
*Consistency: Smooth thixotropic paste	@ 200°C: 0.31%
*Viscosity (@ 1 RPM/23°C): 55,000 – 90,000 cPs	@ 250°C: 0.65%
Thixotropic Index: 5.2	@ 300°C: 1.93%
*Glass Transition Temp.(Tg): ≥ 30°C (Dynamic Cure 20—200°C /ISO 25 Min; Ramp -10—200°C @ 20°C/Min)	Operating Temp:
Coefficient of Thermal Expansion (CTE):	Continuous: - 55°C to 160°C
Below Tg: 53 x 10 <sup>-6</sup> in/in/°C	Intermittent: - 55°C to 260°C
Above Tg: 107 x 10 <sup>-6</sup> in/in/°C	Storage Modulus @ 23°C: 275,557 psi
Shore D Hardness: 60	Ions: Cl <sup>-</sup> 169 ppm
Lap Shear Strength @ 23°C: 1,480 psi	Na <sup>+</sup> 15 ppm
Die Shear Strength @ 23°C: ≥ 9 Kg / 3,060 psi	NH <sub>4</sub> <sup>+</sup> 40 ppm
Degradation Temp. (TGA): 316°C	K <sup>+</sup> 1 ppm
	*Particle Size: ≤ 45 Microns
Electrical Properties:	
*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	
Thermal Properties:	
Thermal Conductivity: 1.38 W/mK	

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