

Flexible Electrically Conductive Adhesives

Why are Flexible Electrically Conductive Adhesives (ECAs) Important?

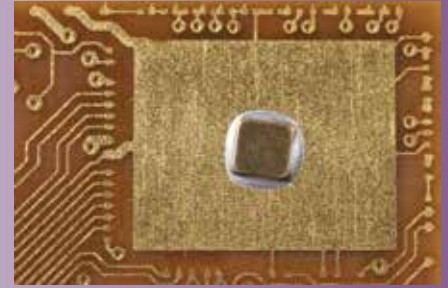
- Flex ECAs are ideal for stress relief of large components or CTE mismatched parts
- Effective Thermal Interface Materials (TIM) versus solder or eutectic bonding; especially with flexible substrates
- Enhanced mechanical performance in thermal cycling



	Product	Viscosity (cPs)	TI	Minimum Cure Time	Pot Life	Tg (°C)	Modulus (psi)	VR (ohm-cm)	ThK (W/mK)	Features
H20E Family	EV2118-1	2,009 @100 rpm	4.3	150°C/10min 120°C/20min 100°C/1hour	3 days	36	184,310	≤0.0001	4.1	H20F modified for enhanced cohesive strength.
	EV2118-2	1,500-3,300 @100 rpm	4.4	150°C/10min 120°C/15min 100°C/1hour	3 days	≥40	130,977	≤0.0005	4.0	H20F modified for even higher cohesive strength than 78-118-1.
	103-151-1	1,929 @100 rpm	3.8	150°C/1hour	3 days	45	256,427	≤0.0005	2.0	EV2118-2 with impact modifiers for additional stress relief.
	111-8-1	2,818 @100 rpm	4.5	140°C/10min 120°C/15min	2 days	50	134,262	≤0.0005	1.2	Faster curing EV2118-2. Designed for temperature sensitive substrates.
EK1000 Family	100-134-4	10,342 @20 rpm	3.1	150°C/1hour + 200°C/1hour	1 week	25	102,382	<0.0001	15.8	A flexible, low Tg version of EK1000.
Low Temp Cure	EJ2108	11,806 @10 rpm	2.4	150°C/1hour 80°C/2hours 23°C/3 days	1 hour	42	2,553	0.00003	4.0	Low temperature cure & outgassing with high ThK for aerospace and semiconductor applications.
E2101 Family	78-134-5	19,046 @10 rpm	3.7	150°C/1hour	4 days	3.7	12,760	≤0.0005	2.1	Very soft version of E2101 with added impact modifiers for additional stress relief in piezo applications. Optimized for stencil printing.
EV2002 Family	78-131-2	15,524 @10 rpm	2.2	150°C/1hour	4 hours	-15	3,929	≤0.001	1.4	Very low Tg EV2002 modified for great printing rheology for solar bus bar applications.

Die Attach

- Stress relief for large die and substrates
- Thermal cycling resistance
- Heat sinking of large components such as Cu heater coils
- Thermal management of high voltage die such as GaN in microwave hybrids



Electronics/Microelectronics

- Used for making electrical connections to PZT electrodes in ink-jetting or medical/ultrasound applications
- Component and die attach to flexible substrates such as Kapton and flex PCB



Solar/Photovoltaic

- Sn, Cu and Ag ribbon stringing in flexible thin film solar cell (CIGS, aSi, OPV, DSC) assemblies
- TIM, heat waste conductor for Concentrator Photovoltaic (CPV) and steam concentrated solar power (CSP)



Please consult our ***Application Experts*** to assist in selecting the most suitable adhesive for your specific technical challenge: techserv@epotek.com



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