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North America: Emerson & Cuming, 46 Manning Road, Billerica, MA 01821 U.S.A. Tel: 1-978-636-9700 Toll Free: 1-800-832-4929 Fax: 1-978-436-9701
Europe: Nijverheidsstraat 7, B-2260 Westerlo, Belgium Tel: +32 (0) 14 57 56 11 Fax: +32 (0) 14 58 55 30 E-mail: emerson.cuming@innet.be

Asia-Pacific: 100 Kaneda, Atsugi-shi, Kanagawa-ken, 243 Japan Tel: +81 462-25-8815 Fax: +81 462-22-1347

China: No. 332 Meigui South Road, Waigaoqiao Free Trade Zone, Shanghai 200131, P.R. China Tel: (8621) 38984800 Fax: (8621) 50484160

Korea: 3rd Fl, Green Tower Building, 1617-34, Seocho-dong, Seocho-gu, Seoul 137-877, Tel: (82)-2-3471-5675, Fax: (82)-2-3471-5674

www.emersoncuming.com

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SELECTOR GUIDE

ELECTRICALLY CONDUCTIVE ADHESIVES

ELECTRICALLY CONDUCTIVE ADHESIVES - CIRCUIT ASSEMBLY ADHESIVES

Product	Chemistry/ Filler	Composition	Viscosity at 25°C (Pa.s)	Work Life at 25°C	Dispensing	Application Method Printing Pin	Transfer	Recommended Cure Schedule	Volume Resistivity (Ohm.cm) Typical Value	Tensile Lap Shear Strength (MPa) Typical Value (AI/AI)	Service Temperature	Features
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Electrically conductive Adhesives

56 C	Epoxy/Ag	A + B (Cat. 9)	Paste	1 hour	•			2 hours @ 65°C	0.001	6	-45°C to +120°C	Two component epoxy paste with low temperature cure capability
57 C	Epoxy/Ag	A + B	Paste	1 hour	•			2 hours @ 65°C	0.0005	6	-45°C to +120°C	Two component (1A/1B) epoxy paste with low temperature cure capability
50298	Epoxy/Ni	A + B	Paste	30 minutes	•			2 hours @ 65°C	0.2	17	-45°C to +100°C	Two component, Nickel-filled epoxy adhesive with low temperature cure capability
C 805-1 # 500	Epoxy/Ag	One Component	TD @ 5 rpm : 100 - 160	4 weeks	•	•		1 hour @ 150°C	0.0004	11	-45°C to +150°C	One component, general use adhesive, long RT work life, high thermal conductivity
C 990 # 333	Epoxy/Ag	One Component	TC @ 10 rpm : 21 - 27	3 weeks	•		•	1 hour @ 150°C	0.0002	5	-45°C to +150°C	One component, high purity epoxy adhesive
CT 4042-30	Epoxy/Ag	A + B (1)	TD @ 10 rpm : 40 - 60 (3)	3 days	•	•		20 minutes @ 120°C or 60 seconds @ 180°C (4)	0.0004	9	-45°C to +150°C	General use adhesive, available in a two component (1A/1B) or in a premixed and frozen (FP) version
CE 3511 P	Epoxy/Ag	One Component	TD @ 10 rpm : 40 - 55	2 weeks	•		•	1 hour @ 100°C or 20 minutes @ 150°C	0.001	12	-45°C to +150°C	One component epoxy adhesive with long RT work life; can be cured at temperatures as low as 100°C
CE 3514-1	Epoxy/Ag	A + B	TD @ 10 rpm : 30 - 40 (3)	24 hours	•			2 hours @ 80°C or 10 minutes @ 150°C	0.0007 0.0001	7	-45°C to +150°C	Two component, low temperature curing epoxy adhesive, recommended in applications where improved thermal shock resistance is required
CE 8500	Modified Epoxy / Ag	One Component	TD @ 10 rpm : 120 - 140	16 hours	•			60 minutes @ 120°C or 40 minutes @ 150°C	0.0002 0.0002	3	-45°C to +200°C	One component, low stress adhesive for mismatched TCE applications, high thermal conductivity

(1) Premixed and frozen version available (2) Mixed viscosity (3) Hot plate cure

Circuit assembly adhesives (solder alternatives)

84-1 LMI	Epoxy/Ag	One Component	CP-51 @ 5 rpm : 24 - 32	2 weeks	•	•		1 hour @ 150°C	0.0002	11	-45°C to +150°C	One component, high purity adhesive for microelectronic chip and component bonding
8175 A	Epoxy/Ag	One Component	CP-51 @ 5 rpm : 60 - 75	24 hours	•	•		3 minutes @ 150°C (4) or 6 minutes @ 130°C (4) 30 minutes @ 120°C or 5 minutes @ 120°C (4)	0.0003 0.0003 0.0008 0.0008	12	-45°C to +150°C	Fast cure, stress-absorbing epoxy adhesive for surface mount component attach. Compatible with existing SMT assembly lines
CE 3502	Epoxy/Ag	One Component	TC @ 5 rpm : 310 - 350	1 week	•	•		30 minutes @ 120°C or 5 minutes @ 120°C (4)	0.0008 0.0008	6	-45°C to +150°C	One component, low temperature cure adhesive for ultra-fine pitch printing
CE 3516	Epoxy/Ag	One Component	$\gamma = 15 \text{ s}^{-1} : 65 - 75 \text{ (5)}$	1 week	•	•		30 minutes @ 140°C	0.0003	9	-45°C to +150°C	One component, non-bleeding epoxy adhesive with low outgassing, eliminating wicking and bridging under small components
CE 3103	Epoxy/Ag	One Component	$\gamma = 15 \text{ s}^{-1} : 40 - 60$	24 hours	•			3 minutes @ 150°C (4) or 5 minutes @ 125°C (4)	0.0004 0.0004	8	-45°C to +150°C	One component epoxy adhesive with stable contact resistance on all traditional printed circuit board metal finishes, including Sn.
CE 3104 WXL	Epoxy/Ag	One Component	$\gamma = 15 \text{ s}^{-1} : 60 - 85 \text{ (5)}$	24 hours	•	•		3 minutes @ 150°C or 5 minutes @ 125°C	0.0003 0.0003	8	-45°C to +150°C	Compatible with existing SMT assembly lines One component epoxy adhesive with stable contact resistance on all traditional printed circuit board metal finishes, including Sn. Compatible with existing SMT assembly lines

(4) Below oven (5) Preliminary specification