

AG 830-12 Silver Epoxy

Description

AG 830-12 is a one-part silver conductive adhesive based on epoxy resins. It is formulated for very good electrical and thermal conductive properties. It is solvent-free, has low volatiles during cure and very low shrinkage. It has great adhesion and good thermal shock performance. It is specially developed for low stress bonding and encapsulation of electronic components.

Applications

1. Bonding IC chip to metal bond pad.
2. General electrical connections.

Guidelines for Use

1. Thaw the silver epoxy to room temperature (25°C) before use.
2. The silver epoxy may be printed or dispensed on printed circuit boards, semiconductor elements, electrodes or for other connections that require conductivity.
3. The silver epoxy may be cured at 90°C in 60 minutes.

Properties

Property	Test Method	Unit	Typical Value
Chemical type			Epoxy
Appearance	Pen 10		Silver paste
Mix ratio, by weight			One component
Density	Pen 14	g/cm ³	2.56
Shelf life, -40°C	Pen 26	Month	3
Pot life, 25°C	Pen 57	Hours	3
Viscosity, CAP 2000+ viscometer, 25°C, Cap-06@10rpm	Pen 44	cP	3,900
Hardness, cured 90°C /1 hr	Pen 29	Shore D	84
Die shear strength	Pen 42	kgf	11.60
Volume resistivity	Pen 82	ohm.cm	0.0003
Glass Transition Temperature, Tg	Pen 19	°C	86
Coef. of thermal expansion alpha-1	Pen 64	ppm/K	48
alpha-2			200
Conducting medium			Silver

Recommended Cure

Schedule	Temp.	Cure Time
A	90 °C	1 hour
B	120°C	25 min
C	150 °C	15 min

Storage

Tightly close original container of unused product.
Store below -40°C.

Packaging

- 5 ml EFD syringe
- 10 ml EFD syringe
- 30 ml EFD syringe
- 500 g jar

Environment, Health & Safety

This product is RoHS compliant. It does not contain any known carcinogenic, mutagenic or teratogenic components.

Contact Information

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