

LINQSIL™ LSC100 Junction Coating

One-Part Clear Liquid Silicone Junction Coating



COATING FOR SEMICONDUCTOR JUNCTIONS

100% SOLIDS COATING

IONIC PURITY LEVELS OF MAX 1 PPM



PRODUCT DESCRIPTION

Clear one-part liquid silicone elastomer system for protection and passivation of semiconductor junctions.



PRODUCT APPLICATION

Used for insulation, protection and passivation of diode, rectifier, thyristor, transistor, LED, integrated circuit and hybrid IC junctions.



PRODUCT FEATURES

One-part heat cure silicone system with very high purity. A 100% solids coating with excellent electrical and thermal stability.



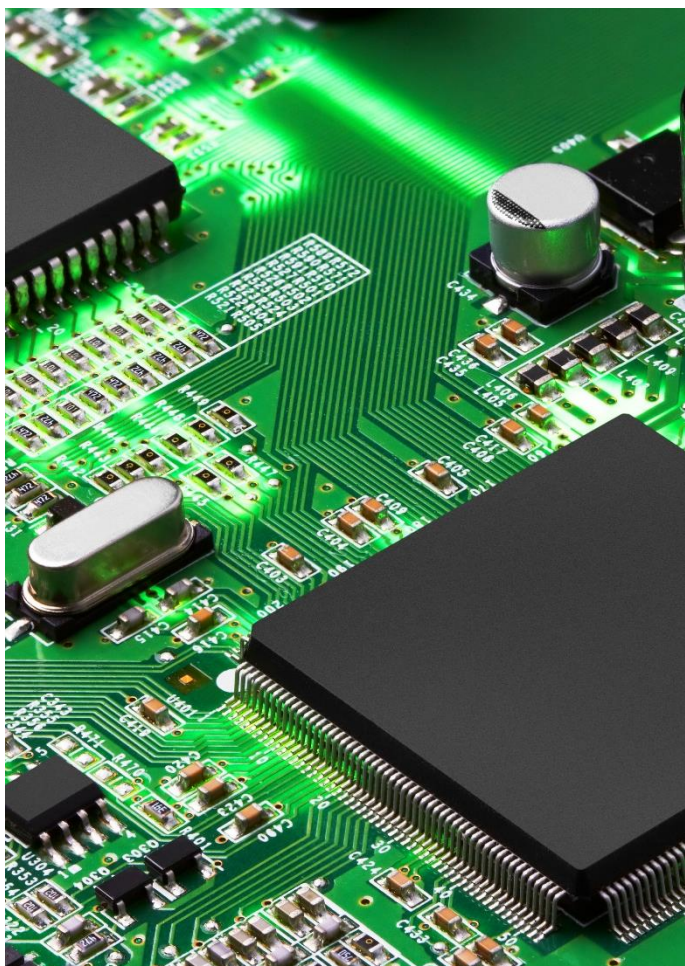
PRODUCT DESCRIPTION

LinqSil LSC100 liquid silicone junction coatings, are high purity, 100% solids, siloxane systems designed for **semiconductor junction coatings**. The LinqSil LSC100 coatings are one-part silicone coatings with a heat cure. Demanding production procedures and rigid quality control requirements guarantee ionic purity levels of maximum 1 ppm.

LinqSil LSC100 junction coatings will prevent electrical breakdown, minimize junction surface leakage and stabilize peak inverse voltage, and provide environmental protection for high temperature performance and thermal cycling. LinqSil LSC100 is designed for passivation coating of transistor, diode and rectifier junctions



PRODUCT APPLICATION



Typical applications of the **LinqSil LSC100** liquid silicone coating systems include conformal coatings that are used to provide mechanical and electrical insulation prior to plastic molding, protective coatings over hybrid integrated circuits to prevent chip damage during potting and other ultra-pure, hermetic-type passivations of semiconductors to create a shell against corrosion.

► Applications

- Passivation coating of transistor, thyristor, diode and rectifier junctions
- Conformal coating prior to plastic molding
- Protective coating of hybrid integrated circuits



PRODUCT FEATURES

PRODUCT PROPERTIES	UNIT	VALUE
System		One part
Solids	%	100
Appearance/Colour		Clear
Viscosity	Cps	7,500
Shelf Life	Months	3
Storage Temperature	°C	4,5 or below
Specific Gravity		1.03
Mix Ratio		N/A
Pot Life	Hours	N/A
Durometer (Shore A)		25
Tensile Strength	Psi	400
Elongation	%	130
Dielectric Strength		>450
Dielectric Constant @ 10 ⁶ Hz		3.5
Volume Resistivity	Ohm/cm	10 ¹⁵
Dissipation Factor @ 1mc		0.001
Curing schedule - Pre-heating (optional) - Curing - Post cure (minimum)		0.5 hours @ 80 °C 1 hour @ 135-150 °C 2 hours @ 200-225 °C

► PRODUCT FEATURES & BENEFITS

- One-part siloxane system
- Heat cure
- 100% solids coating
- High ionic purity (Max 1 ppm)
- Excellent electrical and thermal stability

► PRODUCT NOMENCLATURE

LSC : Liquid Silicone Coating

100 : One-part semiconductor junction coating

METALLIC IMPURITY

METAL	ppm MAX	METAL	ppm MAX
Aluminum (Al)	1.0	Lead (Pb)	1.0
Antimony (Sb)	1.0	Magnesium (Mg)	1.0
Chromium (Cr)	1.0	Nickel (Ni)	1.0
Copper (Cu)	1.0	Potassium (K)	1.0
Iron (Fe)	1.0	Sodium (Na)	1.0



PRODUCT FEATURES

DIRECTIONS FOR USE

Electrical performance of junctions coated with these elastomers is influenced by both temperature and duration of cure. Longer post-cures and higher temperatures generally improve device characteristics.

PACKAGING

LinqSil LSC100™ is delivered in 500g containers.

STORAGE AND HANDLING

To prolong shelf-life, store **LinqSil LSC100** resins in a cool, dark place. The seal of the bottle should be examined and kept tight to reduce the possibility of moisture or contaminants contacting the resins.

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

DATA RANGES

The data contained herein may be reported as a typical value and/or range values based on actual test data and are verified on a periodic basis.

The above figures are typical material properties only and are not to be used for product specification purposes. To generate a specification for this product, please contact our Quality Manager and request a copy of the current stock specification. The information and recommendations supplied in this document are believed to be accurate but no guarantee of their accuracy is made; they are for guidance only and should not be construed as a warranty. All implied warranties are expressly disclaimed, including without limitations any warranty of merchantability and fitness for use. It is recommended that purchasers before using this product conduct their own tests to determine whether the product is suitable for their particular purposes under their own operating conditions.



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