



GETELEC

We protect your electronics

EPOXY SILVER CONDUCTIVE GLUE

GT 12097

Use : GT 12097 is two-component silver-loaded epoxy, specially designed as a chip adhesive for when low temperature polymerisation is required. GT12097 is also recommended for applications needing high temperature polymerisation : at 105°C, GT12097 polymerises in 5 minutes, unlike the 30 minutes needed by many single component products . This low viscosity resin contains no solvent

Life span : Before mixing, the resin has a life span of 2 years in ambient conditions; mixed product remains usable for 4 days also at ambient. Due to its long mixed lifespan and the absence of solvents, GT12097 is ideal for us on automated production lines. The combination of a long lifespan when mixed and rapid polymerisation mean that GT 12097 is an ideal production optimisation tool.

Temperature : Experience demonstrates that, polymerised above 120°C, GT12097 withstands soldering temperatures of 300°C to 400°C.

Properties	Standards-test
Number of components	2
Color of components	Part A : Silver Part B : Silver
Mix ratio by weight	1:1
Specific gravity	Part A : 2.03 Part B : 3.07
Minimum bond line cure schedule :	
175 °C	45 seconds
150°C	5 minutes
120°C	15 minutes
100°C	2 hours
80°C	3 hours
Pot life	2.5 Days
Shelf life	1 year at 23°C
Consistency	Smooth, thixotropic paste
Viscosity (at100 RPM/23°C)	2.200 - 3.200 cPs
Thixotropic Index	4.63
Coefficient of thermal Expansion (CTE) :	
Below Tg	31x10 ⁶ in/in/°C
Above Tg	158x10 ⁻⁸ in/in/°C
Hardness Shore D	75
Lap shear strength at 23°C	1.475 psi
Die Shear strength at 23°C	> 10 Kg / 3.400 psi
Degradation Temp (TGA)	425°C
Weight Loss	
at 200°C	0.59 %
at 250°C	1.09 %
at 300°C	1.67 %
Continuous operating temperature	-55°C to +200°C
Intermittent operating temperature	-55°C to +300°C
Storage modulus at 23° C	808.700 psi
Particle size	≤ 45 Microns
Volume resistivity at 23°C	≤ 0.0004 Ohm-cm
Thermal conductivity (Based on method laser flash)	2.5 W/m.K
Thermal conductivity (Based on thermal resistance data)	29 W/m.K
Thermal resistance (Junction to Case)	6.7 to 7.0 °C / W

Presentation
28 gram jar