Typical Assembly recommendations for Open Cavity Plastic Packages

1) Die Thickness: 12 – 15 mils

2) Die Attach Method: Epoxy

3) Wire Bond:

Thermal Compression Au Bonding

a) 0.001" to 0.0013" Diameter Wire
b) Ceramic capillary with 20˚ taper
c) Maximum package temperature during bonding: 150˚C
d) Minimum wire length: 15 mils / nominal 25 mils

Al Wedge Bonding

a) 0.001" to 0.00125" Diameter Wire
b) 60˚ or 90˚ wire feed machine (depending on available bond area)
c) Maximum package temperature during bonding: Room Temperature
d) Minimum wire length: 15 mils / nominal 25 mils

4) Seal Types:

a) Lid (plastic or ceramic)
b) Tape
c) Glob Top

Spectrum Semiconductor Materials, Inc. 2027 O'Toole Ave. San Jose, CA 95131
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Product Data Sheet – SI 100 Lid Seal Adhesive

Description:

SI 100 is a thermally conductive B-stage adhesive. The material has a relatively low coefficient of thermal expansion, high glass transition temperature and good adhesion properties to plastic and ceramic substrates. SI 100 is RoHSA compatible.

Selected Properties (Cured Material):

Color: Cream
Thermal Conductivity: .45 w/m -˚k
Glass Transition Temperature: 130˚C
Linear Coefficient of Thermal Expansion: (130˚C and below) $48x10^{-8}$

Recommended Cure Schedule:

30 Minutes @ 175˚C
60 Minutes @ 150˚C

Note: The above referenced information is for informational purposes only. Spectrum recommends that customers evaluate this product in their own facility for their specific application.

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