Encapsulants for Microelectronic Assembly from Dymax

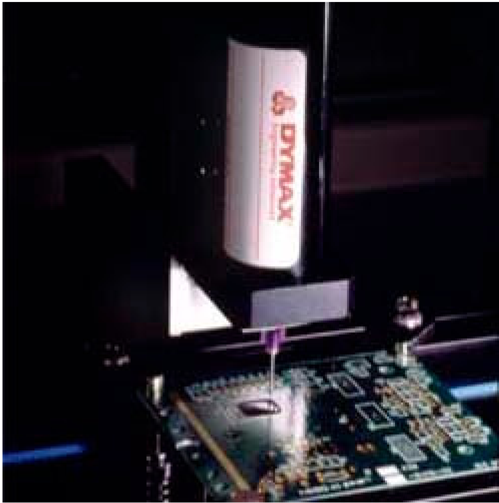
Description

DYMAX 9000 Series Microelectronics Encapsulants are tough, flexible UV curing encapsulants which are single part and cure in seconds; they cut costs and processing times associated with microelectronic assembly. These encapsulating materials have high ionic purity, excellent adhesion and resistance to humidity and thermal stock to effectively protect components. They contain no sharp, abrasive mineral or glass fillers to abrade fine wires, and their combination of low T_g and low modulus means low stress. Ultraviolet light curing resins are ideal for glob top and chip on board (COB) applications and are especially suited for encapsulating IC´s on flex circuits. Clear and black grades are available along with a wide range of viscosities, from thin wicking to non-flowing gels for dam and fill.

Microelectronics Encapsulants – Dual Cure Systems

Dymax 9100 Series are designed with a UV/visible light and secondary ambient moisture-cure system, making them ideal for applications where shadowed areas are present. The materials produce a tough, flexible encapsulant for bare die, wire bonds or integrated circuits. They cure tack free after UV cure, so pcb assemblies can be handled sooner with less potential damage. Moisture cure is obtained after two days compared to the typical seven days with other systems, shortening the time for further handling as well as final testing and assembly. These materials are available in varying viscosities, allowing for performance and dispensing to be optimised. They are jet dispensable for more accurate placement and more efficient material usage. The cured encapsulants have high CTE and low T_g, giving flexibility and low stress.

Encapsulants for Microelectronic Assembly from Dymax



Dymax LED protection encapsulants are also available to enhance LED performance.

Features & Benefits

- Fast cures – clear resins cure in 5 to 15 seconds
- Encapsulants for rigid or flexible circuits
- Cure on demand – only upon exposure to light
- Complete curing in seconds at room temperature
- Precise flow control and easy dispensing
- One part – no freezing or thawing necessary
- Room temperature storage – unlimited pot life
- Low cost, compact curing systems

Encapsulants for Microelectronic Assembly from Dymax

- Low stress
- Free of particulate fillers
- Resistance to humidity and thermal stock
- High ionic purity

Applications

- Chip on Board (COB); glob topping
- Chip on flex
- Wire bond protection
- Flexible electronics coating

Selector Guide

Product	Applications	Features
DYMAX 9001-E-v3.0	Thin coating, wicking and underfill	Low viscosity; can be cured in shadow areas at 120°C
DYMAX 9001-E-v3.1	Glob top	Medium viscosity; can be cured in shadow areas at 120°C

Encapsulants for Microelectronic Assembly from Dymax

Product	Applications	Features
DYMAX 9001-E-v3.5	Precision application to specific electronic assembly areas	High viscosity; can be cured in shadow areas at 120°C
DYMAX 9001-E-v3.7	Precision application to specific electronic assembly areas	Highest viscosity; can be cured in shadow areas at 120°C
DYMAX 9008	Encapsulating on flex/polyimide	High adhesion to polyimide to – 40°C; flexible
DYMAX 9-20558	Strain relief or chip encapsulation	Flexible; moisture barrier for metal, ceramic, epoxy and glass filled plastics
DYMAX 9101	Chip on board, chip on flex, chip on glass, wire bond protection	Low viscosity; secondary moisture cure
DYMAX 9102	Chip on board, chip on flex, chip on glass, wire bond protection	Medium viscosity; secondary moisture cure

Encapsulants for Microelectronic Assembly from Dymax

Product	Applications	Features
DYMAX 9103	Chip on board, chip on flex, chip on glass, wire bond protection	High viscosity; secondary moisture cure; dam and fill applications

Supplied by:

intertronics

INTERTRONICS
12a Station Field Industrial Estate, Banbury Road, Kidlington
Oxfordshire England OX5 1JD
t 01865 842842 e info@intertronics.co.uk

Last updated: August 2019 Version: 4.2

Statements, technical information and recommendations contained herein are based on tests we believe to be reliable but they are not to be construed in any manner as warrantees expressed or implied. The user shall determine the suitability of the product for his intended use and the user assumes all risk and liability whatsoever in connection therewith.