



Adhesives for the Encapsulation Application of the Optical Fiber Industry

Applications of the optical fiber connector industry

The applications are very extensive in this industry, including fiber converters, receivers, patch cords, repeaters, 2-way connectors, and DWDMs. We mainly supply the adhesives for this industry. The main characteristics of our products include the following:

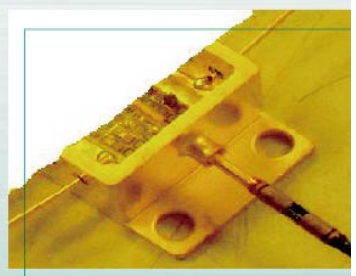
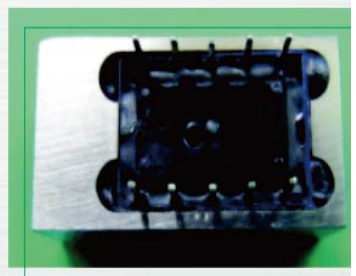
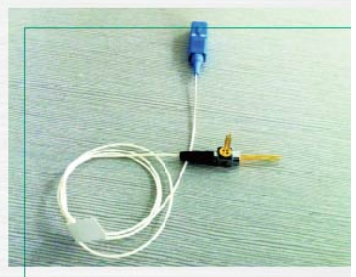
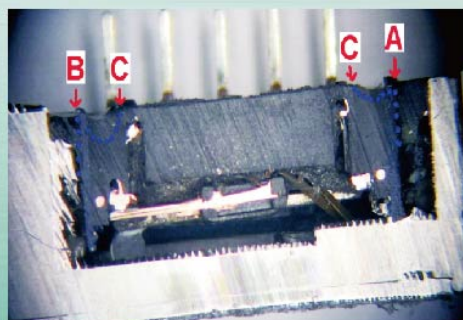
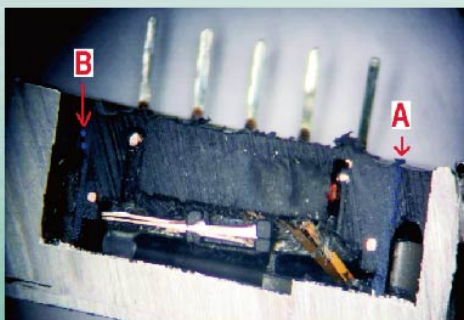
- Low shrinkage which will not affect the transmission of light and non-sagging UV adhesive
- Great optical characteristics and the refractivity complies with the requirements of the industry.
- Good working properties which satisfy the general processes in the industry
- Great resistance to high temperature, weather, and aging with 10:1 environmentally friendly epoxy resin
- The UV adhesive, and one-component as well as two-component high-temperature resistant epoxy resin, have physical properties as good as those of US and Japanese companies. They are well packed with stable quality.

The environmental requirements of the optical fiber industry: In compliance with the Telcordia GR-1221-CORE standard

- Mechanical Shock – Shock level - 500G, Duration - 1 ms
- Vibration Test - Frequency - 20 ~ 2000 Hz, Duration - 4 min per cycle and 4 cycles per axis
- Thermal Shock Test - 40~85 with a dwell time of 30 min each and temperature conversion in 5 min, 256 Cycle
- Dry Heat Test - 85 Celsius degree, Humidity - < 40% RH, Test duration: 2,000 hours
- High temperature and high humidity storage test -- 85 Celsius degree, Humidity - 85 % RH, Test duration: 100, 168, 500, 1000, 5000 hours
- Low temperature test -40°C, Test duration: 2,000hours

The material suppliers should have the ability to perform professional analysis:

Potting adhesives and perform the above environmental simulation tests after making sure they are completely cured. Afterwards, the cross-section analysis is made.




The adhesive overview of this industry:

Based on the specific applications corresponding to the products.


Bonding of the glass fiber with the optical fiber connector ---

High-temperature resistant wafer-grade encapsulation ---


Two-Component Epoxy Resin

Character	Product No.	WDM Multiplexer
<ul style="list-style-type: none"> • Low temperature curing 80°C*30min, 150°C*1 min • Low volume shrinkage 2.1% • Low ion volatility • Passed the reliability test, thermal shock, high temperature and high humidity, high temperature cooking • Low-volatility and low-irritation formulation with finger-saving and nonallergic characteristics 	<ul style="list-style-type: none"> • JB267 Low Viscosity Series • JB271 Medium Thixotropy and High Thixotropy, Non-Sagging Series • JB273 Low Viscosity, Black Series • JB245 Low Viscosity and Low Temperature Curing Series 	


UV adhesive for optical fiber positioning

Character	Product No.	Mixed PON BOSA
<ul style="list-style-type: none"> • Spot light fast fixing 3 sec, 1000-1500mj/cm² • Low volume shrinkage 2.5% 	<ul style="list-style-type: none"> • GP207 Series, One-Component UV 	


Epoxy resins for ring encapsulation after applied to the module

Character	Product No.	GPONOLT BOSA
<ul style="list-style-type: none"> • Medium viscosity for fast dispensing • Low temperature 100°C * 30min fast curing 	<ul style="list-style-type: none"> • JD034 Series, One-Component Epoxy • JB271 Series, Two-Component Epoxy 	

Epoxy resins for encapsulation of modules

Character	Product No.	Sensor
<ul style="list-style-type: none"> • Increase the anti-cracking performance after the toughness is increased for the adhesive formulation • Fair operational time and easy defoaming after potting 	<ul style="list-style-type: none"> • JC750 Series, One-Component Epoxy • JD140 Series, Two-Component Epoxy 	

Epoxy resins for encapsulation of the both ends of the filter

Character	Product No.	Filter
<ul style="list-style-type: none"> • High viscosity, high thixotropy, and non-sagging • Low shrinkage < 3 % • Low temperature 100°C * 30min fast curing 	<ul style="list-style-type: none"> • JB542 Series, One-Component Epoxy 	

UV adhesives for optical fiber devices

Character	Product No.	PON BOSA
<ul style="list-style-type: none"> • Colored for easy identification during dispensing and curing • Low shrinkage < 3 % • Fast curing by 1000mj/cm² spot light 	<ul style="list-style-type: none"> • GN827 Series, One-Component UV 	