

# OPTOCAST™

**FOR OPTO-ELECTRONICS**

Recognized as a world leader in UV cure adhesive technology, EMIUV offers the complete line of OPTOCAST adhesives. All OPTOCAST products are designed for fast, precision bonding and aligning of optoelectronic devices and components. The products feature low stress, optical clarity, minimal shrinkage upon cure, extremely low CTE values, and excellent moisture resistance. Available in a wide range of physical properties and curing options that include UV, UV and thermal cure, and two component systems, there is an OPTOCAST adhesive product for virtually any optoelectronic application or manufacturing process.

- **Fast cure**  
Allows for high speed production and automated processes
- **No primers required**  
Minimal chance for errors and faster process
- **Little or no odor**  
Better manufacturing environment
- **Low CTE**  
Maintain stability of alignments throughout temperature cycling
- **Low shrinkage**  
Maintain critical alignments during cure
- **Low out-gassing**  
Prevents contamination inside sealed or hermetic packages
- **Low ionics**  
Prevents corrosion or contamination
- **Low moisture absorption**  
Good performance in high temperature / high humidity

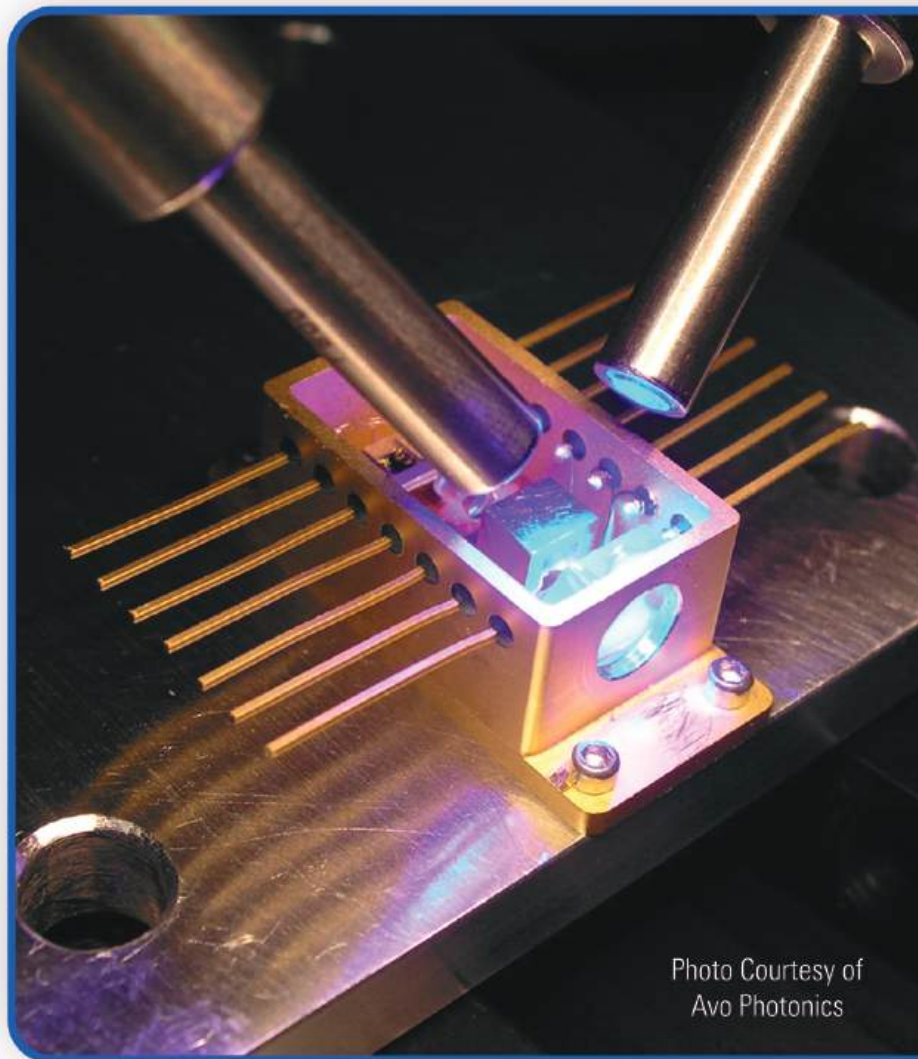


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Avo Photonics

 **EMIUV™**  
Electronic Materials Inc.  
LEADING THE WORLD IN UV-CURED TECHNOLOGY

## OPTOCAST 3400

The OPTOCAST 3400 series products are UV and thermal cure epoxy systems designed for the precision mounting and fixturing of optoelectronic components. All feature low CTE, minimal shrinkage and excellent moisture resistance. Contact EMIUV for additional products and variations not listed below.

OPTOCAST Product	Viscosity	CTE ppm / °C	Maximum Filler Particle Size µm	Tg °C
3400	175,000	18	100	150
3405	11,000	50	100	100
3408	40,000	14	12	150
3410	100,000	14	24	150
3411	15,000	22	100	150
3415	100,000	12	100	150

## OPTOCAST 3500

The OPTOCAST 3500 series products are UV cure epoxy adhesive systems with excellent optical, moisture, and shrinkage properties. OPTOCAST 3500 series products are also available with a secondary thermal cure designated as "-HM". Contact EMIUV for additional products and variations not listed below.

OPTOCAST Product	Viscosity	CTE ppm / °C	Refractive index	Tg °C
3505	400	60	1.52	150
3527	1,200	55	1.51	140
3514	55,000	75 to 80	1.51	-10
3553	1,000	55	1.52	140

## OPTOCAST 3700

The OPTOCAST 3700 series products are UV acrylic adhesive systems that feature extremely fast cure, good optical properties and adhesion to a variety of both organic and inorganic substrates. Contact EMIUV for additional products and variations not listed below.

OPTOCAST Product	Viscosity	CTE ppm / °C	Refractive index	Tg °C
3718	50	93	1.473	60
3723	5,000	90	1.475	40
3724M	70,000	90	1.475	35
3725L	8,000	70	N/A	55
3741	50,000	16	N/A	100
3761L	8,500	50	1.52	95

## THERMAL CURE PRODUCTS

EMI also offers a wide range of thermal cure adhesive products for applications in which a UV cure process may not be suitable or desired. Different viscosities, Tg's, CTE's, and cure profiles are available. Contact EMIUV for additional products and information.

EMIUV Product	Parts	Viscosity	Tg °C
OPTOCAST 3663-5K	1	5,000	95
DIEBOND 4460	2	10,000	110
EMCAST 4252	1	100,000	135
mCAST 7389	2	5,000	65
mCAST 7390	2	5,000	95

\* For additional detailed technical information and data on OPTOCAST products, please refer to the EMI Technical Data Sheet (TDS) for that product. All data in this bulletin is based on our own research and the research of others. They are believed to be accurate, however no guarantee of accuracy is made. Product description is sold without warranty except conformity to specification and on condition that the purchasers shall determine suitability for their particular purpose.



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