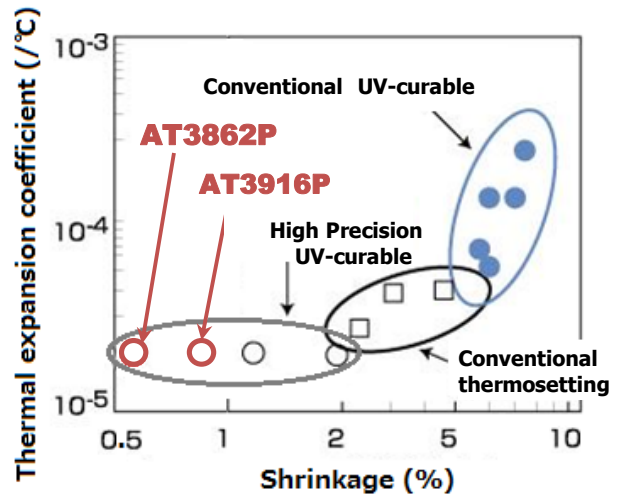


## Minimal position changes due to curing time and temperature

# High Precision Adhesives

We recommend adhesives which can easily fix optical components with sub-micron accuracy.

- Shrinkage rate during curing is very low (less than 0.5 %).
- Thermal expansion coefficient is small (less than 20ppm/°C).
- Using ultraviolet ray curing makes alignment easy.



### Excellent Durability

No peeling after 200 cycles in the heat cycle test (simplified test)

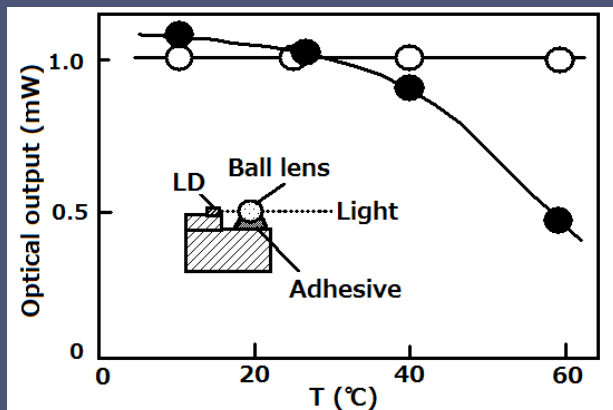
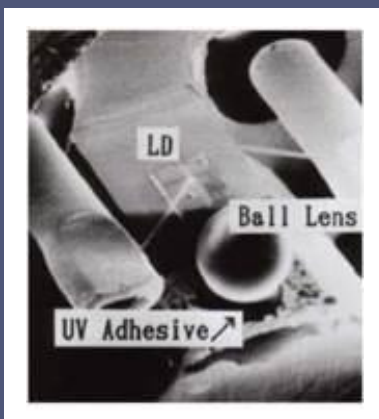
### Low shrinkage rate

Shrinkage rate during curing is 0.5% (AT3862P)

### Thermal expansion coefficient is small

CTE is less than 20ppm/°C

### Configuration Image



Temperature Properties of LD Module

## Specifications

Item	Conditions	Units	AT3862P	AT3916P
Viscosity	25°C	mPa·s	180,000	36,000
Curing Conditions	UV Intensity	mW/cm <sup>2</sup>	100	100
	Time	min	2	2
Glass transition temperature (Tg)	Temp. of max. peak value of elastic loss	°C	195	233
Rate of curing shrinkage	(Density change)	%	0.5	0.9
Hardness	Shore D	-	94	91
Thermal expansion coefficient	25-100°C	ppm/°C	20	18
Bending adhesion strength	Initial period	kgf/cm <sup>2</sup>	>210	>220
	121°C100% after10h		>114	>128
Elastic modulus	25°C	MPa	3000	4600
Water absorption	1mm,after 24h	%	0.3	0.2
Weight loss on heating	5wt%	°C	422	372
ongoing : Heat cycle test -40~85°C 200cycles	Bending adhesion strength	kgf/cm <sup>2</sup>	98	237
	Appearance Check	-	No peeling	No peeling

\*These products are transported at normal temperature. However, please store in a frozen state.

※ All company names, product names, etc., indicated herein are trademarks or registered trademarks of each respective company.  
 ※ Please understand that all comments and data recorded herein may be subject to change without prior notification.  
 ※ Numerical values listed are measured values. They are not performance guarantees.

For more information

<http://www.ntt-at.com/product/adhesive/>



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