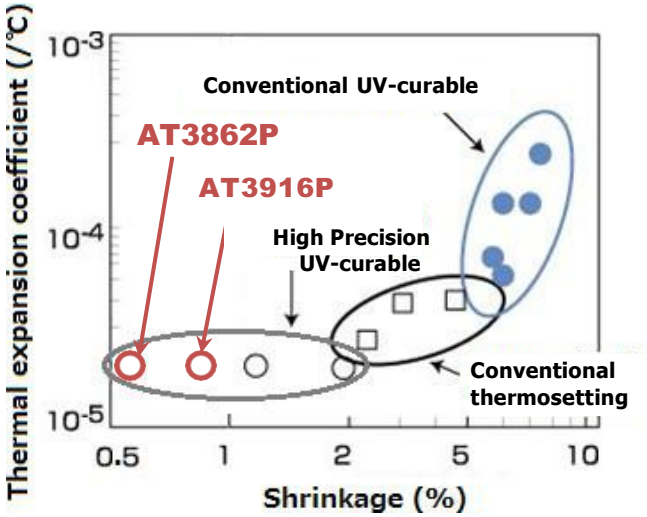
Minimal position changes due to curing time and temperature

High Precision Adhesives

We recommend adhesives which can easy to 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 UV light curing makes alignment easy.



Excellent Durability

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

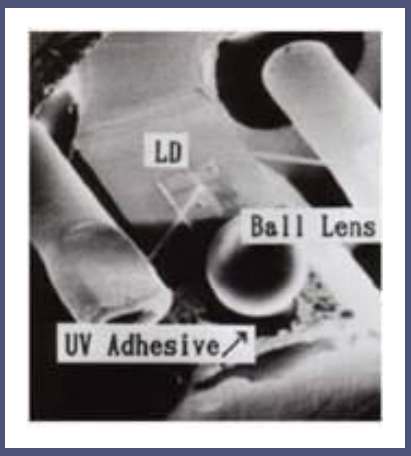
Low shrinkage rate

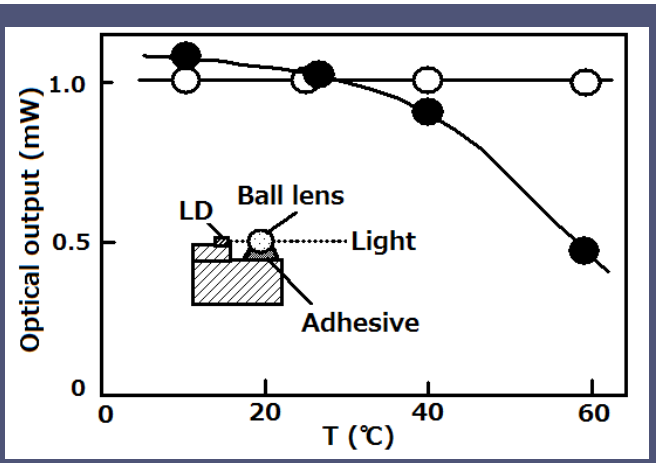
Shrinkage rate during curing is 0.5% (AT3862P)

Thermal expansion coefficient is small

CTE is less than 20ppm/°C

■ Configuration Image





Temperature Properties of LD Module

Properties

Item	Conditions	Units	AT3862P	AT3916P
Viscosity	25°C	mPa・s	500,000	20,000
Curing Conditions	UV Intensity	mW/cm^2	100	100
	Time	min	2	5
Glass transition temperature (Tg)	$tan\delta_{max}$	°C	195	233
Rate of curing shrinkage	(Density change)	%	0.5	0.9
Hardness	Shore D	–	94	91
Thermal Expansion Coefficient (CTE)	25-100°C	ppm/°C	20	18
Elastic Modulus	25°C	MPa	3000	4600
Water Absorption	Thichness: 1mm, after 24H	%	0.3	0.2
Weight Loss on Heating	5wt%	°C	422	372

Durability Test Results

Item	Conditions	Units	AT3862P	AT3916P
Shear Bond Strength	Initial period	kgf/cm^2	>210	>220
	121°C, 100% after 10H		>114	>128
	260°C for 5min Process		262	194
	Heat Cycle, -40 - 85°C, 200cycles		98	237
	Appearance after Heat Cycle	–	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.
※ The values in the table above are not specifications.

For more information http://www.ntt-at.com/product/adhesive/

NTT Advanced Technology Corporation
Optical Products Business Unit
NTT Musashino R&D Center, 3-9-11, Midori-cho,
Musashino-shi, Tokyo, 180-0012, Japan
TEL: +81 422 39 8934, FAX: + 81 422 39 8935

Authorized Distributor in India
G P NET
67 & 68, 2nd Floor, 1st Cross, 1st Main Road, Penfield Gardens
Telecom Layout, Srirampura, Jakkur Post, Bangalore – 560064, INDIA
TEL : +91-80-23639899 Email : sales@gpnet.co.in
Website : www.gpnet.co.in