

# FLASHBOND™ UV-3720

(Formerly BP-053106)

# PRELIMINARY TECHNICAL DATASHEET

### **PRODUCT DESCRIPTION**

FLASHBOND<sup>™</sup> UV-3720 is a filled, low shrinkage, light curable epoxy designed for active alignment application on optical assemblies, camera modules, and LiDAR. UV-3720 is formulated to be curable with heat only at moderately high temperatures for application where the adhesive cannot be exposed to light. This product is halogen free, contains low ionic content, and survives 85RH/85°C for >1000 cycles.

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Featur	es

- Fast UV/LED Cure
- Dual Cure with Heat
- Halogen Free
- 85RH/85°C >1000 cycles

- LCP
- PCB
- PPS
- FPC

### Applications

- Active Alignment
- Optical Assembly
- Camera Modules

### UNCURED PROPERTIES

Property	Value
Solvent Content	No Nonreactive Solvents
Appearance	Off White Flowable Paste
Solubility	In organic solvents
Specific Gravity	1.60
Viscosity, cPs @ 25°C	60,000 - 70,000

## **CURED PROPERTIES**

Property	Value
Durometer Hardness, Shore D	>85
Elongation %	1.0
Volumetric Shrinkage, %	1.5
Glass Transition, Tg, °C	155
CTE, α1, ppm/°C	30
CTE, α2, ppm/°C	90
Water Absorption, % (24hrs/25°C)	0.10

DISCLAIMER: All data given here is offered as a guide to the use of these materials and not as a guarantee of their performance. The user should evaluate their suitability for own purposes. Properties are typical and should not be used in preparing specifications. Statements are not to be construed as recommendations to infringe any patent.



#### **CURE OVERVIEW**

#### **Light Fixation Time**

Wavelength, nm	Intensity, mW/cm <sup>2</sup>	Time, seconds
LED 365	500	3-5
LED 365	1000	1-2
LED 365	1200	<1

#### **Thermal Cure**

This product can be cured using heat only in the absence of the above light or in conjunction with light curing. The below is recommended for heat only cure:

85°C 50-60 minutes 125°C 10-15 minutes

\*Actual times can vary based on part configuration, oven, exposure, mass of adhesive, and volume.

#### **STORAGE & SHELF LIFE**

Store material at 2°C and 8°C when not being used. Material should be removed and returned to room temperature before use (23-75°C). Once at room temperature the material should be used within 5-7 days. Storage at temperatures above recommendation can lead to advancement and polymerization. At temperatures above 70-75°C violent exotherm can occur. Material is sensitive to UV and visible light. Do not expose material to open light prior to use. If stored properly between 2°C-8°C the shelf life of this material is 6 months. This product must be shipped cold <10°C to avoid advancement of adhesive and accidental exposure to extreme temperatures.

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