UV REFLOWABLE LENS

Proprietary UV technology from

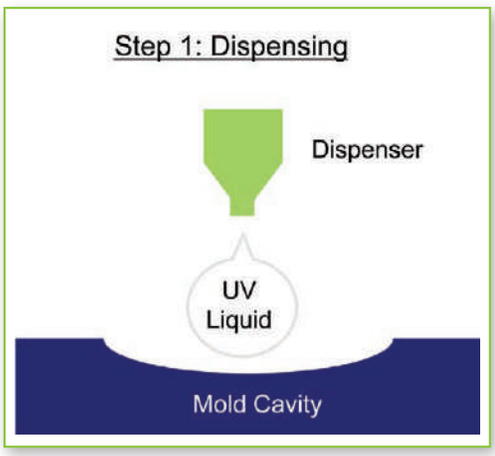
has created UV cured lens – an ultimate optical solution to meet the design specifications of today's mobile devices and other consumer electronics that have gone increasingly smaller and thinner.

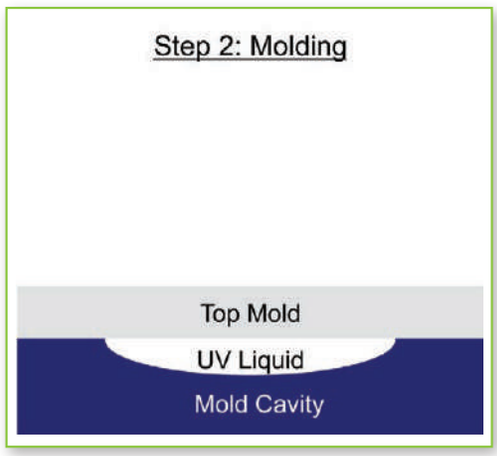
Fully developed in-house, the proprietary UV cured technology produces super thin optical lens without compromising its optical features. With the ability to go as low as 0.2mm in lens thickness, the UV lens can be adapted for a variety of customized lens designs to suit customers' optical applications and requirements.

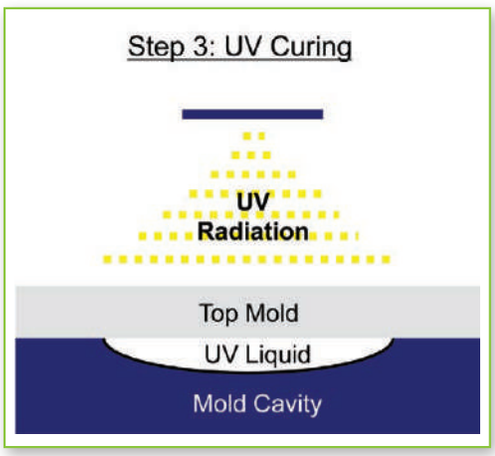
Features & Benefits

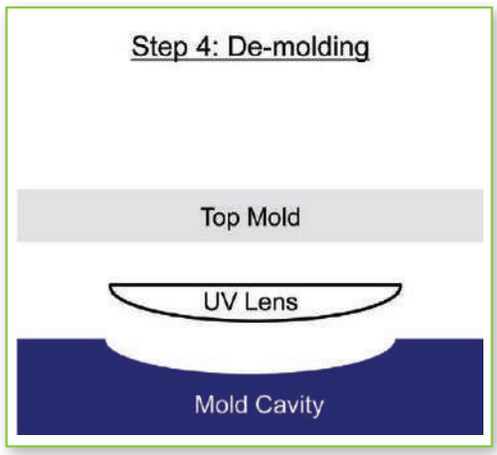
- Lens is made using high quality UV-cured epoxy resin
- Able to withstand up to 260°C during reflow process
- Able to achieve a high optical transparency of more than 88%
- Able to produce a minimum lens thickness of 0.2mm
- Scalable for mass production

Fabrication Process









PRECISION PLASTIC & OPTICAL COMPONENTS

Product Properties

Material	
Material	Epoxy resin
Solvent Content	Solvent-free
Curing Method	UV curing

Optical	
Transparency	>88% (visible spectrum 400~680nm)
Refractive Index	1.51
Abbe Number	47

Mechanical	
Density	1.1 g/cm^3
Volume Shrinkage	4% - 5%
Shore Hardness	69

Thermal	
Short Term Temperature Peaks	260°C
Operating Temperature	-10°C to 120°C

UV reflowable lenses used in LED packaging

Multi-cavity lens array

Types of Optical Designs Available

- Dome lens
- Total internal reflection (TIR) lens
- Fresnel lens
- Free form lens

Applications

- LED packaging
- Sensor packaging
- Fresnel flash lens

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