



# Oshino Lamps Ltd.

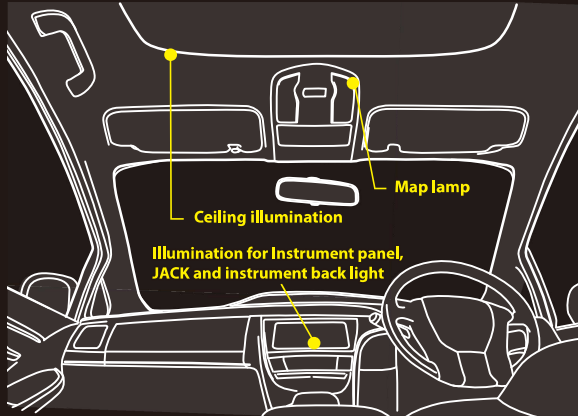


**Optical Products Business**

# Light Guide

Product introduction

Creates light for security, safety and comfort with light guide



## ◀ Direct illumination

Techniques we build for the development of automotive SMLs are used in direct illumination which secures safety by providing light to hands and foot areas.

- Map lamp
- Courtesy lamp
- USB, JACK lens

## ◀ Back light illumination

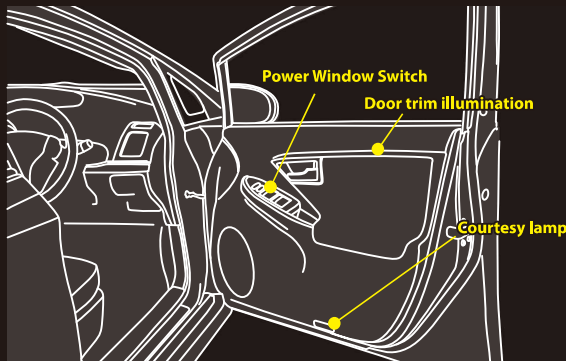
With high performance lens in a limited space, it will support your switching operations by providing highly visible light.

- Power window switch
- Steering switch

## ▶ Indirect illumination

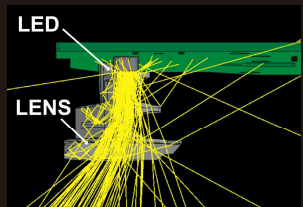
Provide highly distributed ambient illumination light to envelop passengers with softly illuminated light in the car interior space.

- Ceiling illumination
- Door trim illumination
- Center console illumination
- Inner handle illumination



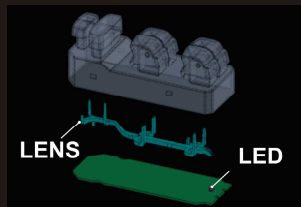
## ▼ Map Light

We developed patented 3 layers optical lenses. Map light secures stable illumination in the interior atmosphere by refracting straight light from interior ceiling. These engineering techniques are based on techniques we build for the development of automotive SMLs for long time period.



## ▼ Window Switch Lens

We successfully achieved 7 switch light illuminations with just one light source through simulation despite space limitation and light control difficulties. This result made it possible to resolve color variation and achieved less parts quantity and less assembly processes.



## ▼ Ambient Illumination

Our technical feature is to make complex configured light guide to illuminate consistently when it is equipped along the car interior including LED light source and unit products, not only lens alone. We have capability to design the most suitable configuration by prism or blast treatment depending on applications.

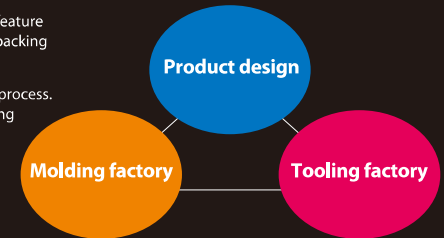


# Design&Production

Designing & Mass production

Capability for consistent production process from designing through production with domestic owned factories

- **Designing** — High level of CAE optical analysis techniques, optical feature evaluation device and surrounding environment are backing up designing process.
- **Tooling** — Capable to process optical surface and micro pattern process. Provide most suitable tooling designing and processing techniques for optical products.
- **Molding** — Capability and techniques which are specialized in molding transparent resin with unique feature. Molding machines and surrounding environment are also specialized in molding transparent resin.



## Factory Introduction

As all designing, tooling manufacturing, molding and assembling processes are performed within Oshino group. We have strong capability to back up and support customers for launching new product development speedily. Our quality products have been serving to many customers as trusted supplier to meet quality, cost and delivery requirements.

**Tooling factory** Capability for designing, processing, manufacturing and assembling plastic molding tooling

**Prism treated inserts manufacturing** Capability to make micro prism processed inserts for mold

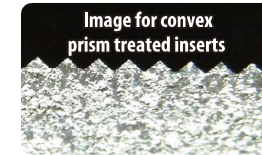


Image for convex prism treated inserts



Image for concave prism treated inserts

【Main Products】  
Capability to make inserts for mold by microfabrication

- Optical products (Lens for automotive and LED unit cover)
- SML parts (Base part for lamp)
- Watch parts (Band and bezel)

**Molding factory** Specialized in molding optical products with transparent resin



【Main Products】  
● Optical Products for automotive (Light guide, lens, diffuser and LED)  
● Optical Products for general industry

## Specialized in transparent resin products

Oshino Lamps Ltd. has knowledge and techniques to achieve complex and high grade manufacturing of transparent resin products from PMMA and PC which strict control is required.



## Clean environment

All molding machines are located inside clean room (which is not common practice) so it provides clean working environment. Cleanliness is maintained equivalent to Class 8 and successfully achieved clean environment in which foreign objects are hardly to be found.



## Quality Products

As "OL : Oshino Lamps" brand, Oshino Lamps Ltd. has established confidence from many customers by continuously providing lighting products to aerospace and automotive industries domestically and globally for the long time.



# Global Network

Sales & manufacturing locations

We have been providing our innovative optical products not only to Japan, but also globally with established production facilities and sales offices all over the world.

## Europe

Development and PCB mounting are performed by owned factories  
Molding and assembling are performed by associated companies

[Estonia, Italy, Germany, France, UK]

## Asia

Molding, PCB mounting and assembling are performed by associated companies

[China • Hong Kong]

## Japan

Development, molding and assembling are performed by owned factories  
PCB mounting is performed by associated companies

[Tokyo, Kagoshima, Yamanashi]

## US and Latin America

Molding, assembling and PCB mounting are performed by associated companies

[America]

Since 1970, we started establishing owned sales offices, R&D facility and factories and now they are working with local customers closely to meet their needs.

We have capability to provide light guide, lens and unit products including LED globally by utilizing owned and associated companies.

It would be possible to develop products in Japan and provide those developed products globally at the same time to meet all customer needs.

### Corporate outline

**Company name** : Oshino Lamps Ltd.

**Location** : 4F Oi-Choyo Bldg. 5-12-10, Higashioi, Shinagawa-ku, Tokyo 140-0011 Japan

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**Website** : <https://www.oshinolamps.co.jp>



**Oshino Lamps Ltd.**

Lighting Products since 1931

Please refer to below for inquiries regarding products and sales

**sales@oshinolamps.co.jp**

Office hours : from Monday through Friday AM9:00 ~ PM6:00