Introducing the IMSE® Light Line Demonstrator 1 with ams OSRAM

TactoTek IMSE® Integrated with ams OSRAM's OSIRE® E5515 Side-Looking Automotive RGB LEDs





IMSE® LIGHT LINE DEMONSTRATOR 1 WITH AMS OSRAM

Enabling Living Colors on Surfaces

TactoTek and ams Osram have co-operated with OSIRE® E5515, the side-looking automotive RGB LED that opens a new era of opportunities for illumination designs in the automotive world. This LED innovation is optimized for use in IMSE® (In-Mold Structural Electronics) technology, allowing attractive lighting in brand colors. With OSIRE® E5515 integrated into IMSE, designers can create thin, seamless and three-dimensional illuminated surfaces.



TactoTek® IMSE® Light Line
Demonstrator 1 with ams OSRAM

Sleek, super-thin IMSE feature demo with full RGB color scale for 3D shaped low profile illumination solutions.



IMSE Building Blocks

Touch Functions

· Capacitive button

Illumination

- Icon illumination
- · Ambient illumination

Part Overview

- Single-piece, seamless 3D design
- Part thickness: 4.0 mm
- · Weight: 54 grams
- In-mold electronics: LED circuitry for RGB illumination and touch control button
- FPC connection interface

Primary Production Processes

- · Screen printing and curing
- Surface mounting electronics high speed 2-dimensional
- · High pressure thermoforming
- · Injection molding

Tooling Requirements

- · A (top) film thermoforming
- B (bottom) film thermoforming
- · Film trimming
- · Injection molding

ams Osram OSIRE® E5515

The new product KRTB AELPS2.32 of the OSIRE E5515 family from ams OSRAM is specifically designed for in-mold processes. The LED has been verified by TactoTek for its IMSE technology and qualified for use in automotive applications (AEC-Q102) by ams OSRAM.

Potential Application Areas

IMSE integrated ams Osram E5515 LEDs are not limited to light lines. It enables you to create:

- Dynamic, ambient lighting for automotive interior surfaces
- HMI control lighting such as icons in any color
- Functional/informative lighting
- Personalization through lighting themes

Start building smarter surfaces today with the help of TactoTek®