



LED Traffic Lighting

Technology Summary

A novel technique for fabricating an light emitting diode (LED) and Schottky barrier diode (SBD) such that the LED and SBD are monolithically integrated on a GaN LED wafer and the SBD has high breakdown voltage and low forward biased voltage drop.

Application & Market Utility

This propriety technology can render LED lamps with simpler structures, lower cost, and longer lifetime than existing lighting products on the market. The LED lamps employing this technology offer extended lifetime (over 100% enhancement) and substantially improved reliability (59% reduction in lamp failure). This technology is highly suitable for outdoor lighting and indoor public illumination applications such as street lighting, traffic lighting, and business area lighting.

Next Steps

Seeking licensing. Patent pending.

TECHNOLOGY READINESS LEVEL

4-7

Seeking

Investment | Licensing | Research

Keywords

- Light emitting diode (LED)
- Schottky barrier diode (SBD)
- Monolithic integration
- indoor public illumination
- outdoor lighting

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