



VISHAY INTERTECHNOLOGY, INC.

## TELUX™ LEDS

For Automotive and Outdoor Applications





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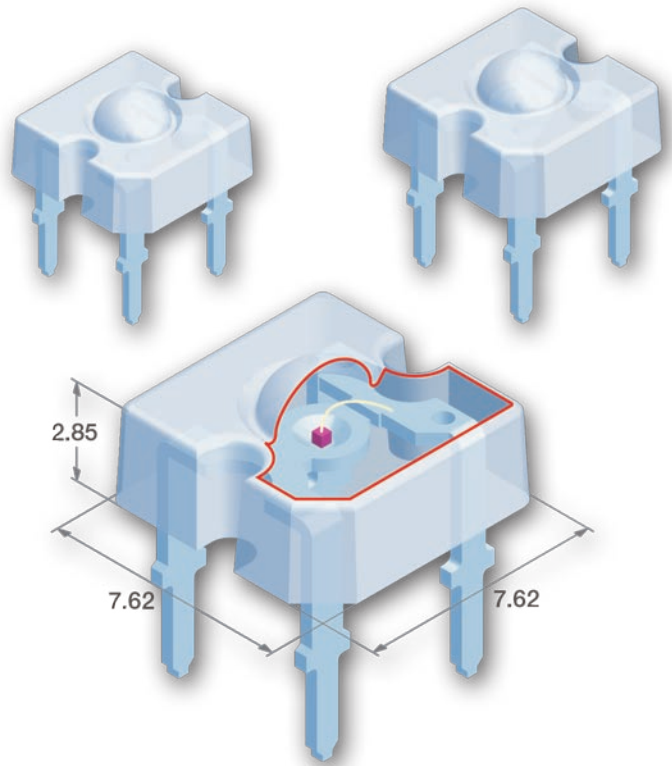
For Automotive and Outdoor Applications

High-performance Vishay TELUX™ LEDs feature a full color range of devices with a wide viewing angle and high luminous flux.

TELUX LEDs are especially designed for rough applications that require a high luminous intensity. These include automotive applications such as brake lights, taillights, and turn signals, as well as outdoor applications such as traffic signals, message panels, and warning lights.

TELUX LEDs are offered in red, yellow, true green, blue-green, blue, and white versions, and with a choice of 30°, 45°, and 55° angles of half intensity or oval emission characteristics with 25° x 68° and 40° x 90° angles of half intensity.

With their excellent luminous flux performance and extended operating temperature range from -40 °C to +110 °C, TELUX LEDs are the premier solution for all exterior automotive and outdoor LED applications.



| CHARACTERISTICS |                            |                |      |               |              |               |                     |
|-----------------|----------------------------|----------------|------|---------------|--------------|---------------|---------------------|
| Type            | Color (wavelength)<br>(nm) | $\Phi_v$ (mIm) |      | $I_F$<br>(mA) | $V_F$<br>(V) | $I_F$<br>(mA) | $\phi$<br>(degrees) |
|                 |                            | Min.           | Typ. |               |              |               |                     |
| TLWR7600        | Red (618)                  | 1500           | 2100 | 70            | 2.2 (< 2.67) | 70            | $\pm 30$            |
| TLWR7900        | Red (618)                  | 1500           | 2100 | 70            | 2.2 (< 2.67) | 70            | $\pm 45$            |
| TLWR8600        | Red (615)                  | 2000           | 3000 | 70            | 2.2 (< 2.67) | 70            | $\pm 30$            |
| TLWR8900        | Red (615)                  | 2000           | 3000 | 70            | 2.2 (< 2.67) | 70            | $\pm 45$            |
| TLWR9000        | Red (615)                  | 2500           | 3200 | 70            | 2.2 (< 2.7)  | 70            | $\pm 55$            |
| VLWR9430        | Red (615)                  | 5000           | 6000 | 70            | 2.5 (< 3.03) | 70            | 25 x 68             |
| VLWR9530        | Red (615)                  | 5000           | 6000 | 70            | 2.5 (< 3.03) | 70            | 40 x 90             |
| TLWR9600        | Red (615)                  | 2500           | 3200 | 70            | 2.2 (< 2.7)  | 70            | $\pm 30$            |
| VLWR9630        | Red (615)                  | 4000           | 7000 | 70            | 2.5 (< 3.03) | 70            | $\pm 30$            |
| VLWR9631        | Red (615)                  | 5000           | 7000 | 70            | 2.5 (< 3.03) | 70            | $\pm 30$            |
| TLWR9900        | Red (615)                  | 2500           | 3200 | 70            | 2.2 (< 2.7)  | 70            | $\pm 45$            |
| VLWR9930        | Red (615)                  | 4000           | 7000 | 70            | 2.5 (< 3.03) | 70            | $\pm 45$            |
| TLWO7600        | Soft Orange (605)          | 1500           | 2100 | 70            | 2.2 (< 2.67) | 70            | $\pm 30$            |
| TLWO7900        | Soft Orange (605)          | 1500           | 2100 | 70            | 2.2 (< 2.67) | 70            | $\pm 45$            |
| TLWY7600        | Yellow (592)               | 1000           | 1400 | 70            | 2.2 (< 2.67) | 70            | $\pm 30$            |
| TLWY7900        | Yellow (592)               | 1000           | 1400 | 70            | 2.2 (< 2.67) | 70            | $\pm 45$            |
| TLWY8600        | Yellow (592)               | 2000           | 3000 | 70            | 2.2 (< 2.67) | 70            | $\pm 30$            |
| TLWY8900        | Yellow (592)               | 2000           | 3000 | 70            | 2.2 (< 2.67) | 70            | $\pm 45$            |
| VLWY9630        | Yellow (592)               | 4000           | 7000 | 70            | 2.5 (< 3.03) | 70            | $\pm 30$            |
| VLWY9930        | Yellow (592)               | 4000           | 7000 | 70            | 2.5 (< 3.03) | 70            | $\pm 45$            |
| VLWTG9600       | True Green (523)           | 2000           | 2500 | 50            | 3.9 (< 4.7)  | 50            | $\pm 30$            |
| VLWTG9900       | True Green (523)           | 2000           | 2500 | 50            | 3.9 (< 4.7)  | 50            | $\pm 45$            |
| VLWB9600        | Blue (470)                 | 800            | 1200 | 50            | 3.9 (< 4.7)  | 50            | $\pm 30$            |
| VLWB9900        | Blue (470)                 | 800            | 1200 | 50            | 3.9 (< 4.7)  | 50            | $\pm 45$            |
| VLWW9600        | White                      | 1500           | 2200 | 50            | 4.3 (< 5.2)  | 50            | $\pm 30$            |
| VLWW9601        | White                      | 2000           | 2500 | 50            | 4.3 (< 5.2)  | 50            | $\pm 30$            |
| VLWW9900        | White                      | 1500           | 2200 | 50            | 4.3 (< 5.2)  | 50            | $\pm 45$            |

For technical support, contact: [LED@vishay.com](mailto:LED@vishay.com)

For further information: <http://www.vishay.com/ref/telux>

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## SEMICONDUCTORS:

Rectifiers • High-Power Diodes and Thyristors • Small-Signal Diodes • Zener and Suppressor Diodes  
• FETs • Optoelectronics • ICs • Modules

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One of the World's Largest Manufacturers of  
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