

## LEDs 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.

### APPLICATIONS

- Automotive
  - Brake lights
  - Taillights
  - Turn signals
- Outdoors
  - Traffic signals
  - Message panels
  - Warning lights

### RESOURCES

- View full LED portfolio: <http://www.vishay.com/leds>
- View the full Optoelectronics portfolio: <http://www.vishay.com/optoelectronics>
- For technical questions: [LED@Vishay.com](mailto:LED@Vishay.com)
- Sales contacts: <http://www.vishay.com/doc?99914>
- Material categorization: For definitions of compliance please see <http://www.vishay.com/doc?99912>





# OPTOELECTRONICS TELUX LEDs



Optoelectronics - AEC-Q101 Qualified TELUX LEDs

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, 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 for AlInGaP from -40 °C to +110 °C, TELUX LEDs are the premier solution for all exterior automotive and outdoor LED applications.





TELUX												
Part Number	Color	Angle of Half Intensity (+/- °) $\phi$	Dominant Wavelength (nm) or Color Coordinate (x/y)			Luminous Flux $\Phi_V$ (mlm)			Forward Voltage, $V_F$ (V)			$I_F$ (mA) for LD, $\Phi_V, V_F$
			Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
TLWR7600	Red	30	611	618	634	1500	2100		1.83	2.2	2.67	70
TLWR7900	Red	45	611	618	634	1500	2100		1.83	2.2	2.67	70
TLWR8600	Red	30	611	615	634	2000	3000		1.83	2.2	2.67	70
TLWR8900	Red	45	611	615	634	2000	3000		1.83	2.2	2.67	70
TLWR8901	Red	45	611	615	634	2000	3000	4800	1.83	2.2	2.67	70
TLWR8902	Red	45	611	615	634	3000		4800	1.95	2.2	2.67	70
TLWR8903	Red	45	611	615	634	2500		4200	1.83	2.2	2.67	70
TLWR9000	Red	55	611	615	634	2500	3200		1.83	2.2	2.67	70
TLWR9600	Red	30	611	615	634	2500	3200		1.83	2.2	2.67	70
TLWR9900	Red	45	611	615	634	2500	3200		1.83	2.2	2.67	70
VLWR9430	Red	25 x 68	611	615	634	5000	6000		1.83	2.2	3.03	70
VLWR9530	Red	40 x 90	611	615	634	5000	6000		1.83	2.2	3.03	70
VLWR9630	Red	30	611	615	634	4000		12200	1.83	2.2	3.03	70
VLWR9930	Red	45	611	615	634	4000		12200	1.83	2.2	3.03	70
VLWR9931	Red	45	611	615	634	5000		12200	1.83	2.2	3.03	70
VLWR9932	Red	45	611	615	634	6000		12200	1.95	2.2	2.67	70
TLWY7600	Yellow	30	585	592	597	1000	1400		1.83	2.1	2.67	70
TLWY7900	Yellow	45	585	592	597	1000	1400		1.83	2.1	2.67	70
TLWY8600	Yellow	30	585	590	597	2000	3000		1.83	2.1	2.67	70
TLWY8900	Yellow	45	585	590	597	2000	3000		1.83	2.1	2.67	70
VLWY9630	Yellow	30	585	592	597	4000		12200	1.83	2.2	3.03	70
VLWY9930	Yellow	45	585	592	597	4000		12200	1.83	2.2	3.03	70
VLWY9932	Yellow	45	597	592	597	6000		12200	1.95	2.2	2.67	70
VLWB9600	Blue	30	462	470	476	800	1200			3.9	4.7	50
VLWB9900	Blue	45	462	470	476	800	1200			3.9	4.7	50
VLWTG9600	True green	30	509	523	535	2000	2500			3.9	4.7	50
VLWTG9900	True green	45	509	523	535	2000	2500			3.9	4.7	50
VLWW8605	White	30		0.30/0.30		630	1000			4.3	5.2	50
VLWW9600	White	30		0.30/0.30		1500	2200			4.3	5.2	50
VLWW9900	White	45		0.33/0.33		1500	2200			4.3	5.2	50

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