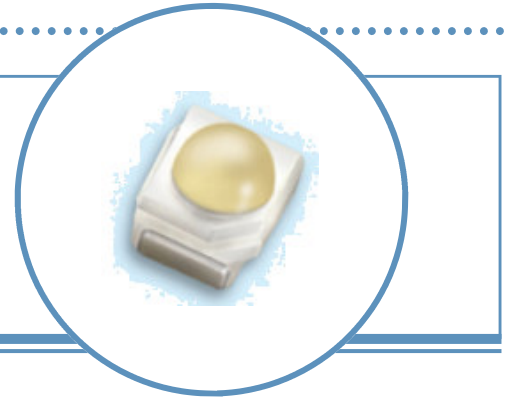


Amber PLCC4 Surface Mount LED with Domed Lens

OVSAABLCR8

- High intensity with low power consumption
- White PLCC4 package with clear domed lens
- Wide viewing angle
- Packaged in 8 mm tape on 7" diameter reel
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow solder process
- Amber (591 nm)

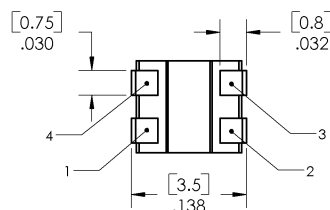
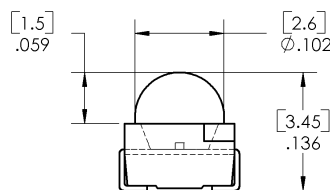
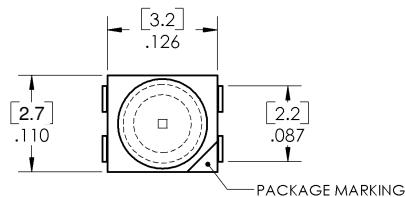


The **OVSAABLCR8** is designed for wide angle, uniform light output. Its internal reflector and colorless clear lens optimize luminous intensity and make it ideal for backlighting applications and for coupling with light guides.

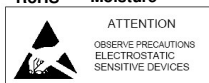
Applications

- Traffic lights
- Signal and symbol luminaire
- Mono-color indicators
- Backlighting (LCD, switches, displays, illuminated advertising)
- Interior automotive lighting (instrumentation clusters)
- Safety marker lights (steps, exit ways)

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVSAABLCR8	AllnGaP	Amber	1800	Water Clear



1, 2, 3 CATHODE 4 ANODE
DIMENSIONS ARE IN INCHES AND [MILLIMETERS].



DO NOT LOOK DIRECTLY AT LED WITH UNSHIELDED EYES OR DAMAGE TO RETINA MAY OCCUR.

OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$ unless otherwise noted

Storage Temperature Range	-40 ~ +100 °C
Operating Temperature Range	-40 ~ +100 °C
Soldering Temperature ¹	260 °C
Reverse Voltage	5 V
Continuous Forward Current	70 mA
Peak Forward Current (10% Duty Cycle, PW ≤ 100 μsec)	200 mA
Power Dissipation	225 mW

Note:

- Solder time less than 5 seconds at temperature extreme.

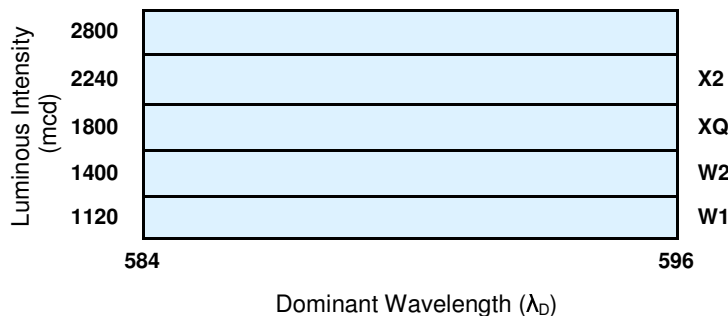
Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I_V	Luminous Intensity	1120	1800	----	mcd	$I_F = 50\text{ mA}$
V_F	Forward Voltage	----	2.6	3.2	V	$I_F = 50\text{ mA}$
I_R	Reverse Current	----	----	10	μA	$V_R = 5\text{ V}$
λ_D	Dominant Wavelength	----	591	----	nm	$I_F = 50\text{ mA}$
λ_P	Peak Wavelength	----	596	----	nm	$I_F = 50\text{ mA}$
$2\theta_{1/2}$	50% Power Angle	----	60	----	deg	$I_F = 50\text{ mA}$

Standard Bins ($I_F = 50\text{ mA}$)

Lamps are sorted to luminous intensity (I_V) and dominant wavelength (λ_D) bins shown. Orders for OVSAABLCR8 may be filled with any or all bins contained as below.



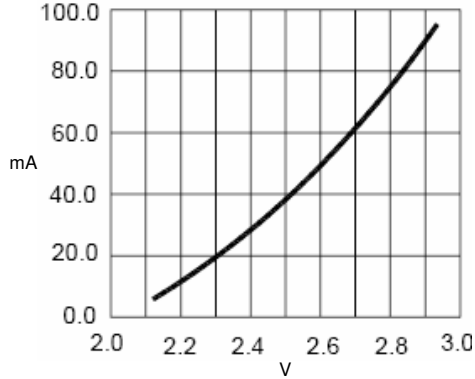
Luminous intensity is at W1 bin or above.

Notes:

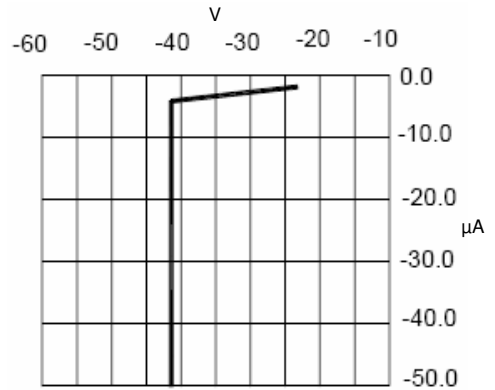
- All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- To designate luminous intensity ranks, please contact OPTeK.

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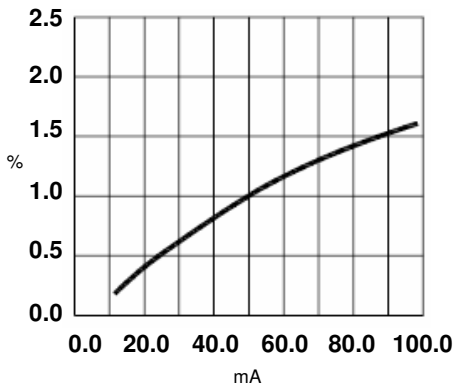
Typical Electro-Optical Characteristics Curves



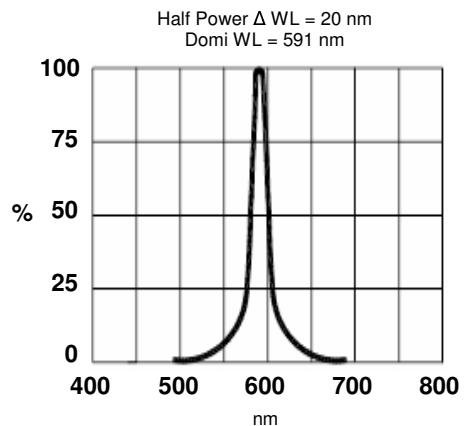
Forward Current vs Forward Voltage



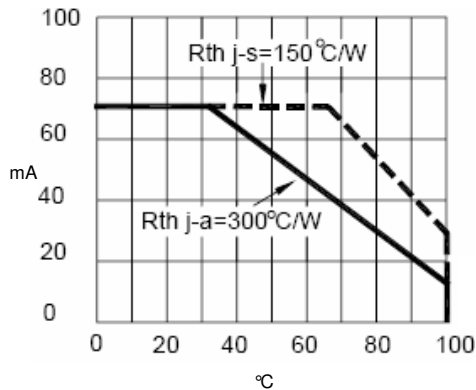
Reverse Current vs Reverse Voltage



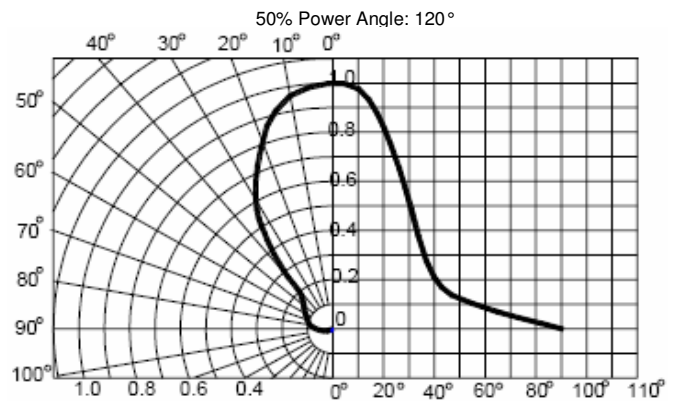
Relative Luminous Intensity vs Forward Current



Relative Luminous Flux vs Wavelength



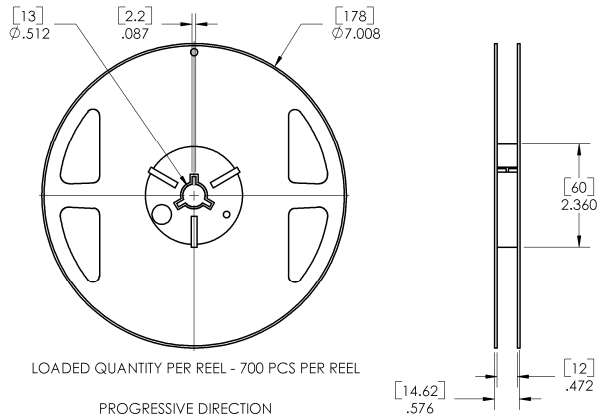
Maximum Forward DC Current vs Ambient Temperature



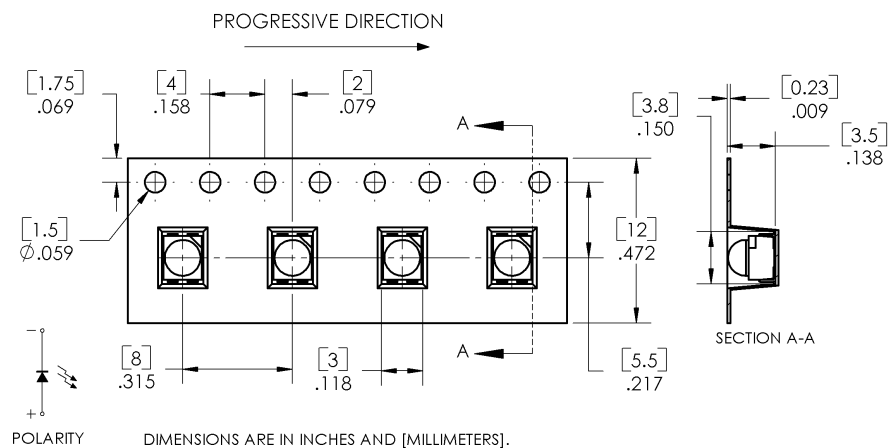
Spatial Distribution

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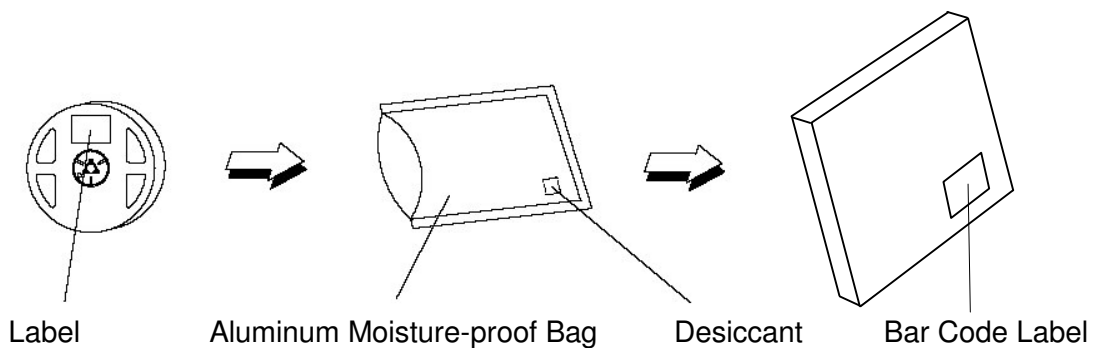
Reel Dimensions: 7-inch reel



Carrier Tape Dimensions: Loaded quantity 700 pieces per reel



Moisture Resistant Packaging



OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.