

Round LED Lamp (3 mm)

OVLAX6CB8 Series

- 65° viewing angle
- Available on tape and reel
- Choice of colors (blue, green, red)

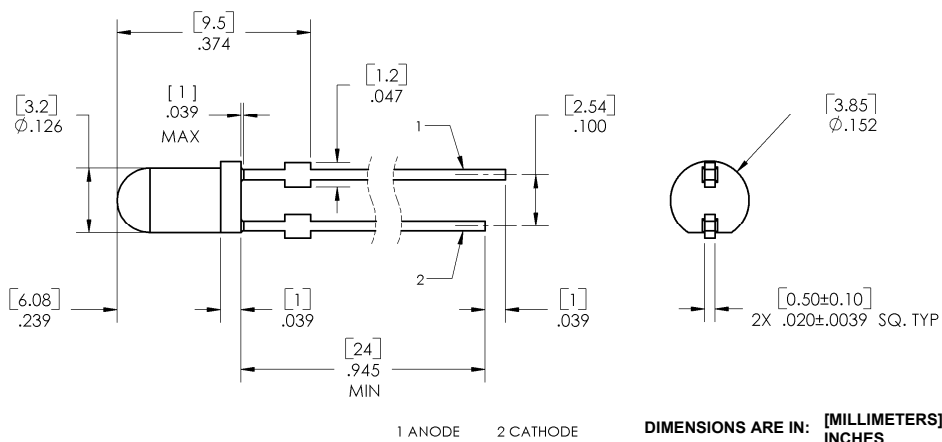


The **OVLAX6CB8** series is designed for wide-angle, uniform light output. The industry standard leads have a stand-off, making this package ideal for PCBoard process assembly.

Applications

- Indicators for medical, industrial, consumer, and office equipment
- Indicators for white goods and home appliances
- Interior and exterior architectural and accent lighting
- Signs and digital information displays, video screen mono-color and RGB presentation
- Automotive backlighting and indicators

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVLAB6CB8	InGaN	Blue	600	Water Clear
OVLAG6CB8	InGaN	Green	2000	Water Clear
OVLAS6CB8	AllnGaP	Red	1100	Water Clear



**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.

Round LED Lamp (3 mm)

OVLAx6CB8 Series



Absolute Maximum Ratings

T_A = 25° C unless otherwise noted

Storage Temperature Range	All	-40 ~ +100 °C
Operating Temperature Range	All	-40 ~ +95 °C
Reverse Voltage	All	5 V
Continuous Forward Current	Blue, Green	25 mA
	Red	50 mA
Peak Forward Current (10% Duty Cycle, 1 kHz)	Blue, Green	100 mA
	Red	200 mA
Power Dissipation	Blue, Green	105 mW
	Red	130 mW
Lead Soldering Temperature (3 mm from the base of the epoxy bulb) ¹	All	260° C

Note:

- Solder time less than 3 seconds at temperature extreme.

Electrical Characteristics

T_A = 25° C unless otherwise noted

SYMBOL	PARAMETER	COLOR	MIN	TYP	MAX	UNITS	CONDITIONS
I _v	Luminous Intensity	Blue	390	600	---	mcd	I _F = 20 mA
		Green	1100	2000	---		
		Red	550	1100	---		
V _F	Forward Voltage	Blue	---	3.6	4.2	V	I _F = 20 mA
		Green	---	3.6	4.2		
		Red	---	2.3	2.6		
V _F	Forward Voltage	Blue	1.7	---	2.5	V	I _F = 1.0 μA
		Green	1.7	---	2.5		
		Red	---	---	---		
I _R	Reverse Current	Blue	---	---	100	μA	V _R = 5 V
		Green	---	---	100		
		Red	---	---	100		
λ _D	Dominant Wavelength	Blue	465	470	475	nm	I _F = 20 mA
		Green	520	527	535		
		Red	620	628	635		
2Θ _{1/2} H-H	50% Power Angle	Blue	---	65	---	deg	I _F = 20 mA
		Green	---	65	---		
		Red	---	65	---		

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

Round LED Lamp (3 mm)

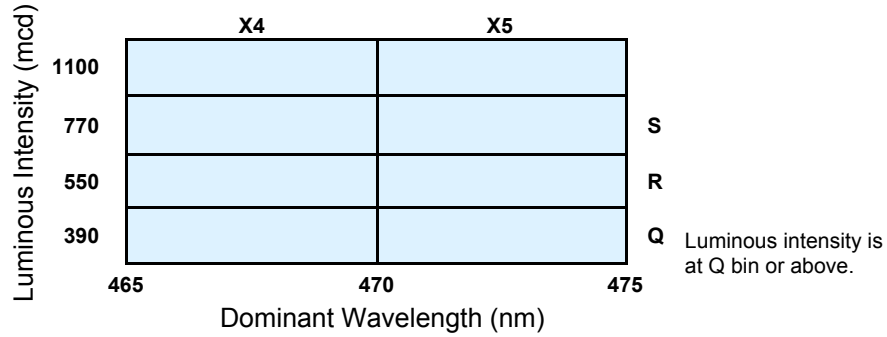
OVLAx6CB8 Series



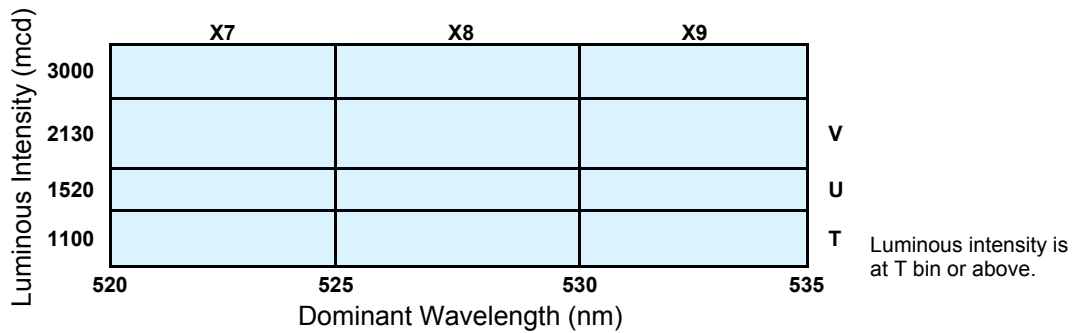
Standard Bins ($I_F = 20 \text{ mA}$)

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

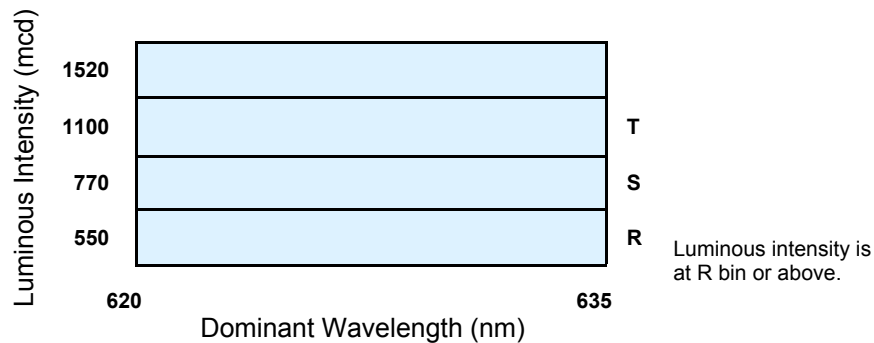
OVLAB6CB8 (BLUE)



OVLAG6CB8 (GREEN)



OVLAS6CB8 (RED)

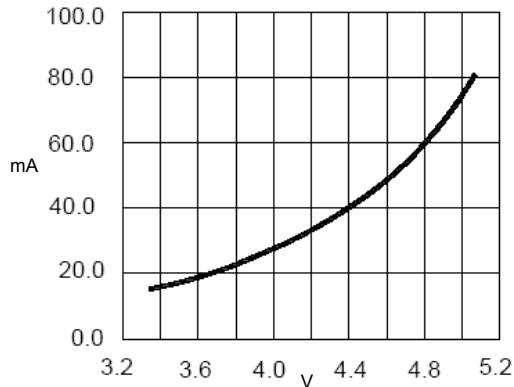


Important Notes:

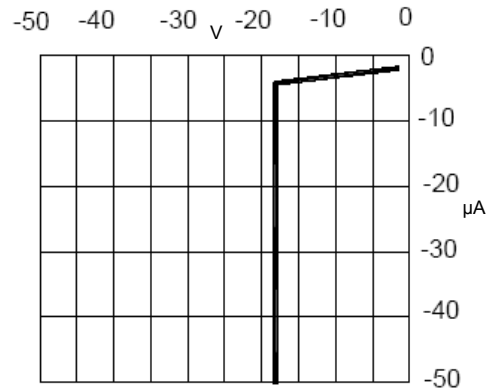
1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
2. To designate luminous intensity ranks, please contact OPTEK.
3. Pb content <1000PPM.

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

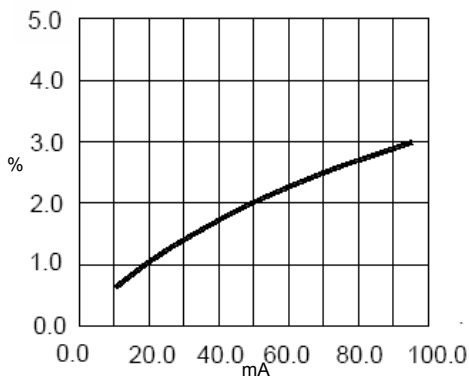
Typical Electro-Optical Characteristics Curves (BLUE)



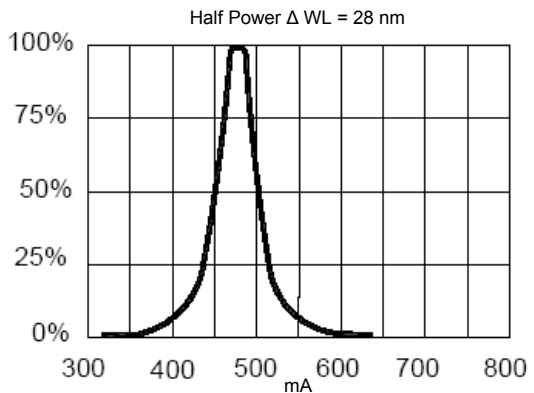
Forward Current vs Forward Voltage



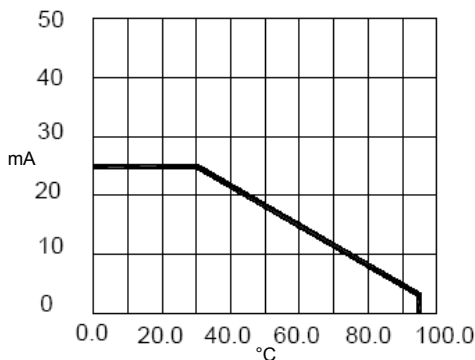
Reverse Current vs Reverse Voltage



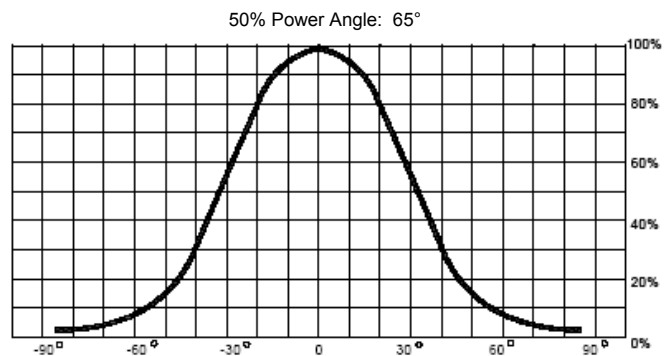
Relative Luminous Intensity vs Forward Current



Relative Luminous Intensity vs Wavelength



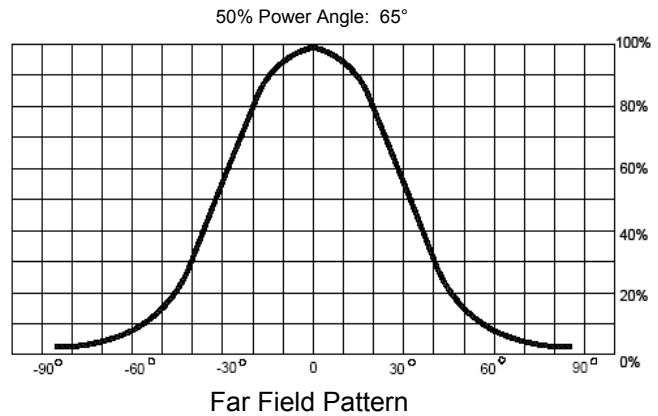
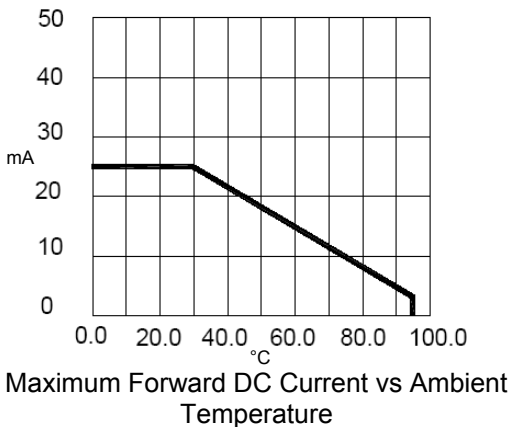
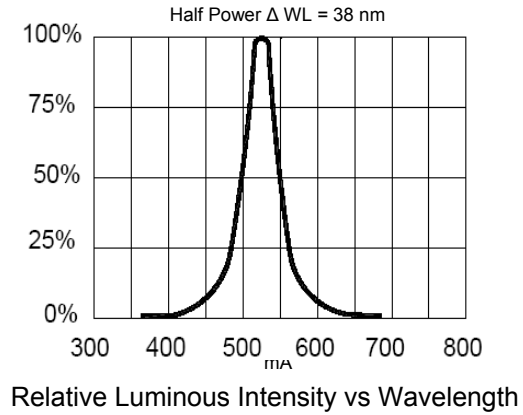
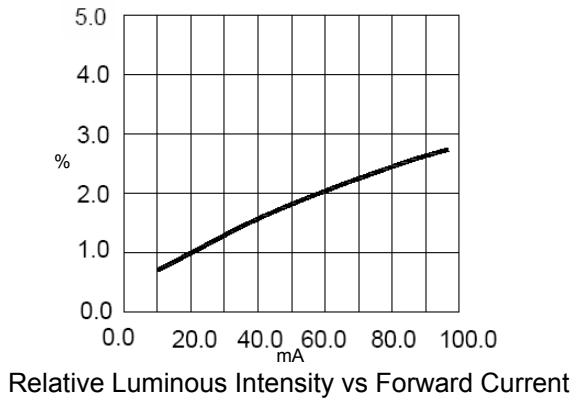
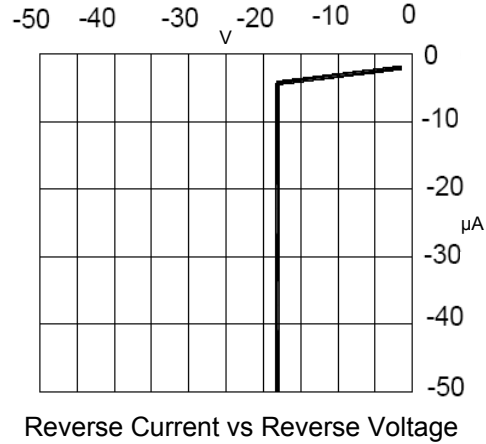
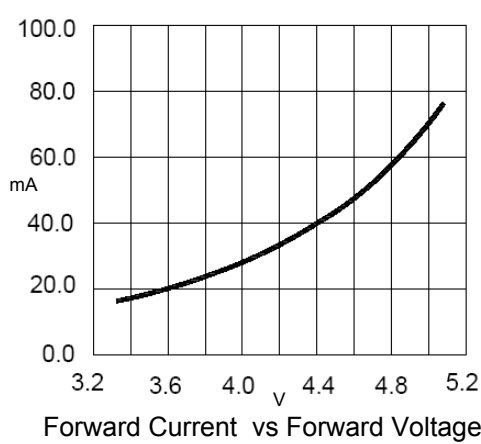
Maximum Forward DC Current vs. Ambient Temperature



Far Field Pattern

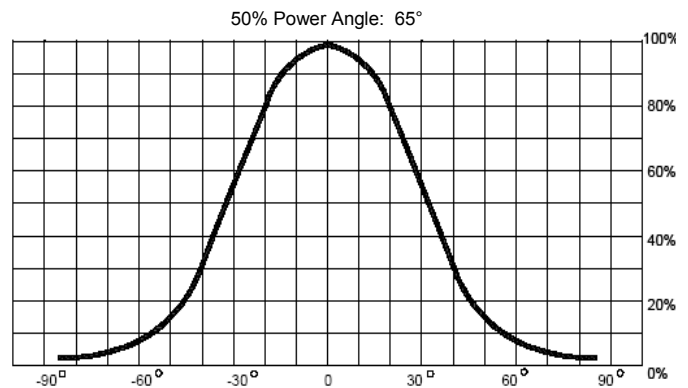
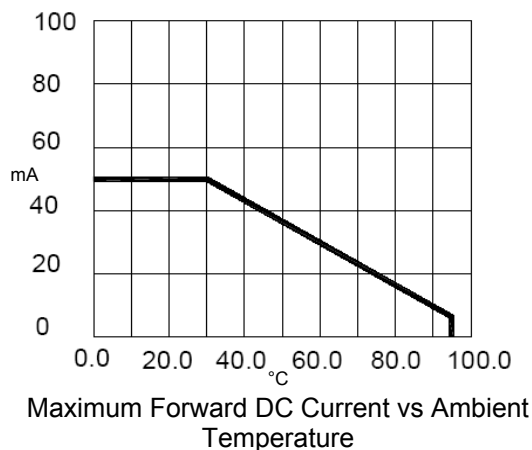
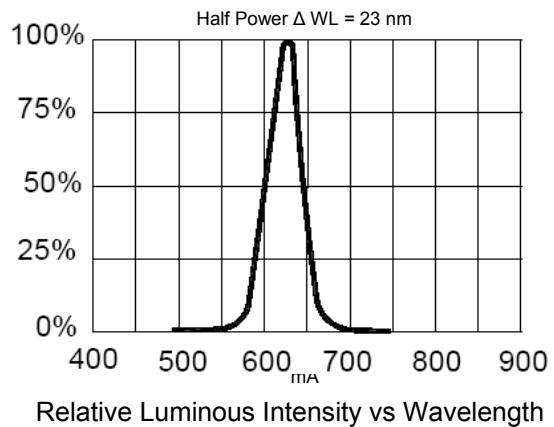
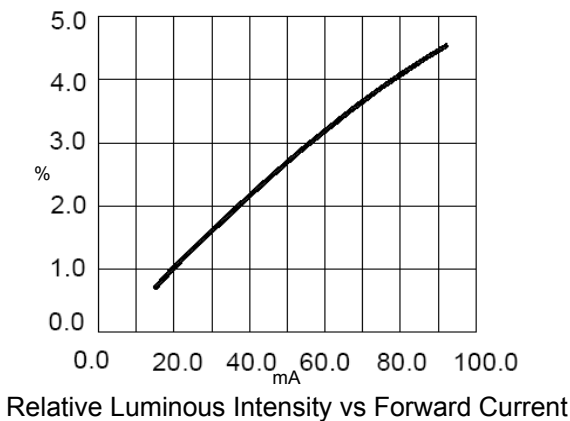
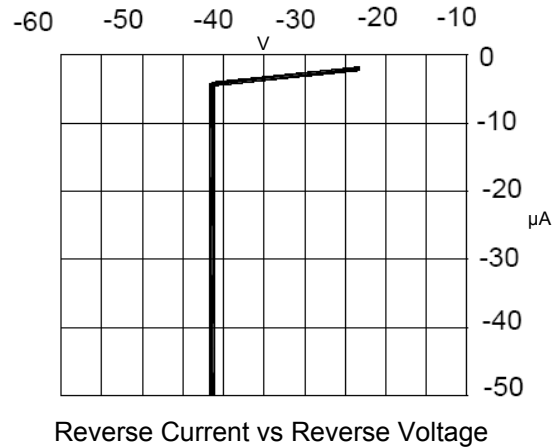
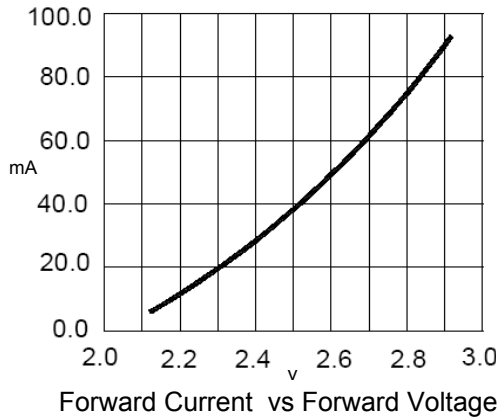
OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

Typical Electro-Optical Characteristics Curves (GREEN)



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

Typical Electro-Optical Characteristics Curves (RED)

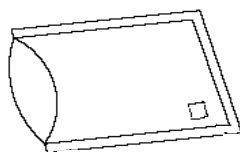


OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

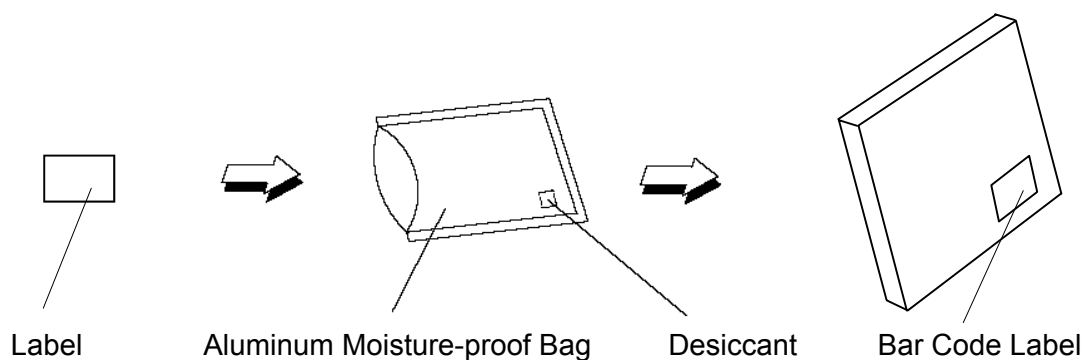
Round LED Lamp (3 mm)

OVLAx6CB8 Series

Quantity: 500 pieces per bag



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.