White PLCC2 Surface Mount LED



OVS9WBCR9

· High luminous intensity

High efficiency

• Emission color: x = 0.29, y = 0.30

Pb-free

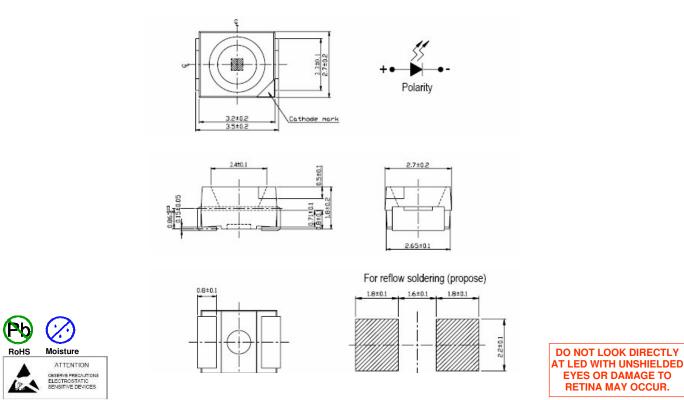


The **OVS9WBCR9** provides high intensity light from a surface mount package. Light output is optimized by an interior reflector and the wide viewing angle adds flexibility for applications ranging from hand-held appliances to automotive interiors.

Applications

- Backlighting of full color LCD
- Automotive interior lighting
- General lighting
- Coupling into light guides
- Entertainment equipment

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVS9WBCR9	InGaN	White	450	Water Clear





Absolute Maximum Ratings

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

TA = 20 °C difference ficted	
Storage Temperature Range	-40 ~ +100° C
Operating Temperature Range	-40 ~ +85° C
Soldering Temperature (5 seconds maximum)	260°C
Reverse Voltage	5 V
Continuous Forward Current	25 mA
Peak Forward Current (Duty 1/10 @ 1 KHz)	100 mA
Electrostatic Discharge	150 V
Power Dissipation	110 mW

Electrical Characteristics

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I _V	Luminous Intensity	240	450		mcd	I _F = 20 mA
V _F	Forward Voltage		3.50	4.3	V	I _F = 20 mA
I _R	Reverse Current			50	μΑ	V _R = 5 V
2 ⊝½	50% Power Angle		120		deg	I _F = 20 mA
Chromaticity Coordinates	X		0.290			I _F = 20 mA
	у		0.300			I _F = 20 mA

Standard Bins (I_F = 20 mA)

Lamps are sorted to chromaticity coordinates shown.

Orders for OVS9WBCR9 may be filled with any or all bins contained as below.

Chromaticity Coordinates (x, y)

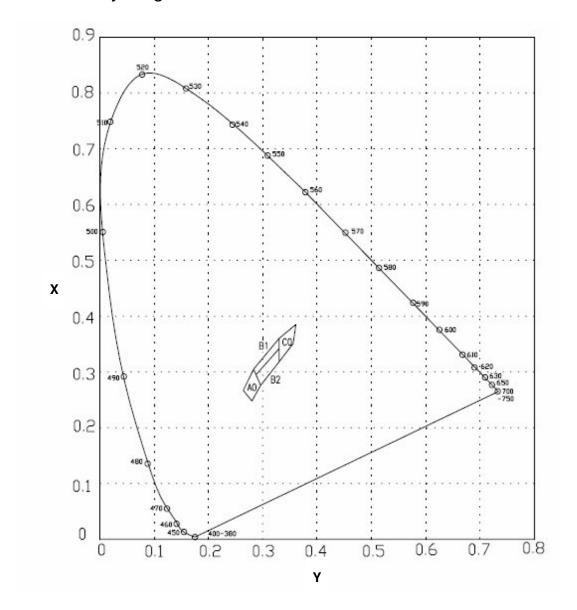
Rank		A0	B1	B2	C0
Chromaticity Coordinates	Х	0.280-0.296	0.296-0.330	0.287-0.330	0.330-0.356
	у	0.248-0.276	0.276-0.318	0.295-0.339	0.385-0.351

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.

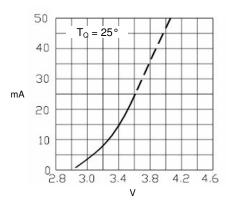


CIE Chromaticity Diagram

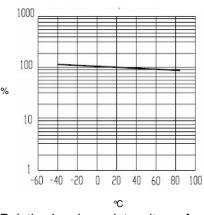




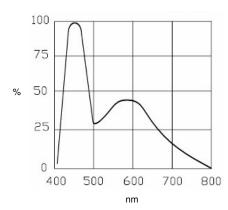
Typical Electro-Optical Characteristics Curves



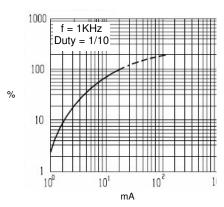
Forward Current vs Forward Voltage



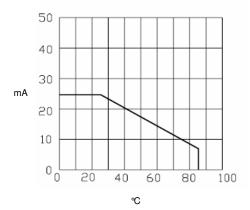
Relative Luminous Intensity vs Ambient Temperature



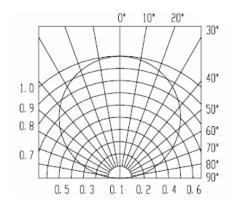
Relative Luminous Intensity vs Wavelength



Relative Luminous Intensity vs Forward Current



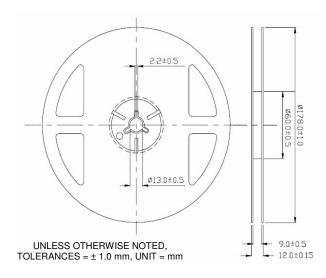
Forward Current vs Ambient Temperature



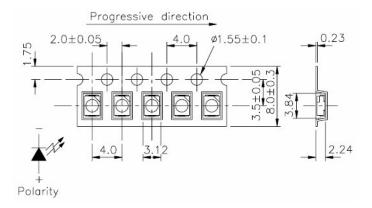
Radiation Diagram



Reel Dimensions: 7-inch reel



Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel



Moisture Resistant Packaging

