# Yellow LED in PLCC-2 SMT Package (120° Viewing Angle)



#### OVS9YBCR7

#### **Features:**

- PLCC-2 SMT Package
- Compatible with automatic placement machine
- Pb free and RoHS compliant



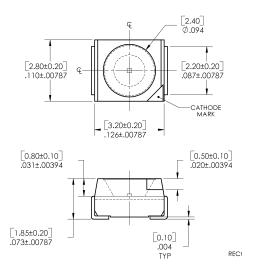
#### **Description:**

The **OVS9YBCR7** is a 120° yellow LED mounted in a plastic PLCC-2 SMT package. The device can be used for many applications in both indoor and outdoor environments.

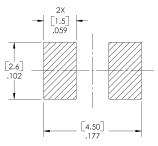
#### **Applications:**

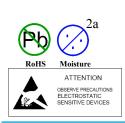
- Interior automotive lighting
- Indoor and outdoor displays
- Indicator
- Backlighting (LCD, displays, switches, office equipment)
- General use

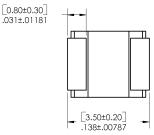
Part Number	Material	Emitted Color	Intensity Typ. (mcd)	Lens Color
OVS9YBCR7	AllnGaP	Yellow	120	Water Clear



#### **Recommended Soldering Pad**







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

#### General Note

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#### **Electrical Specifications**

#### **Absolute Maximum Ratings** (T<sub>A</sub> = 25° C unless otherwise noted)

Storage Temperature Range	-40 ~ +100° C
Operating Temperature Range	-40 ~ +100° C
DC Forward Current	30 mA
Peak Forward Current ( $I_{FP}$ ) (10% Duty Cycle, PW $\leq$ 10 $\mu$ s)	1000 mA
Reverse Voltage (V <sub>R</sub> )	5 V
Current Linearity vs. Ambient Temperature	-0.5 mA/° C
LED Junction Temperature	125° C
Power Dissipation	82.5 mW

#### Electrical Characteristics (T<sub>A</sub> = 25° C unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
I <sub>V</sub>	Luminous Intensity <sup>1</sup>	71.5	120		mcd	I <sub>F</sub> = 20 mA
$V_{F}$	Forward Voltage <sup>2</sup>		2.0	2.75	V	I <sub>F</sub> = 20 mA
I <sub>R</sub>	Reverse Current			10	μΑ	V <sub>R</sub> = 5 V
2 0½	50% Power Angle		120		deg	I <sub>F</sub> = 20 mA
$\lambda_{D}$	Dominant Wavelength <sup>3</sup>	582	589	594	nm	I <sub>F</sub> = 20 mA
Δλ	Spectral Half Width		25		nm	I <sub>F</sub> = 20 mA

#### Notes:

- 1. Tolerance of measurement of luminous intensity is  $\pm 10\%$ .
- 2. Tolerance of measurement of  $V_F$  is  $\pm 0.05V$ .
- 3. Tolerance of measurement of dominant wavelength is  $\pm 1$  nm.
- 4. For cleaning, an alcohol-based solvent such as isopropyl alcohol (IPA) is recommended.

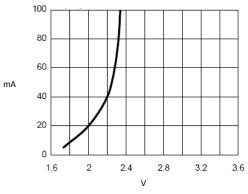
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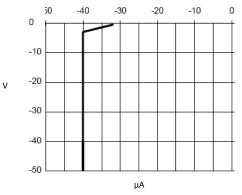


OVS9YBCR7

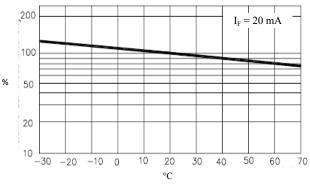
## Performance Typical Electro-Optical Characteristics Curves



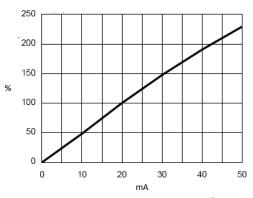
Forward Current vs Forward Voltage



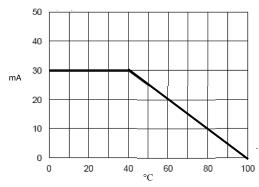
Reverse Current vs Reverse Voltage



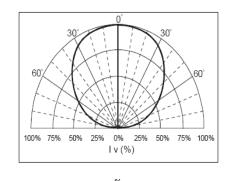
Luminous Intensity vs Ambient Temperature



Luminous Intensity vs Forward Current



Allowable Forward Current vs Ambient Temperature



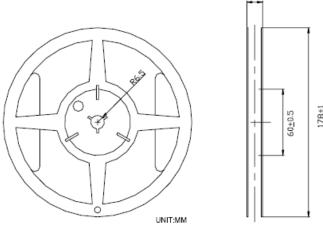
Beam Pattern

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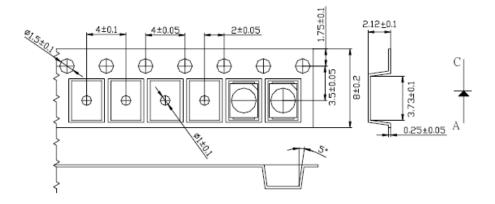


OVS9YBCR7

## Packaging



Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel



#### Notes:

- 1. Polarity referring onto the cathode mark/line is reversed on the UR/HR (N-side-up chips).
- 2. The carrier tape and components loading specifications meet the EIA 481-1a Standard.

#### Moisture Resistant Packaging

