# 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

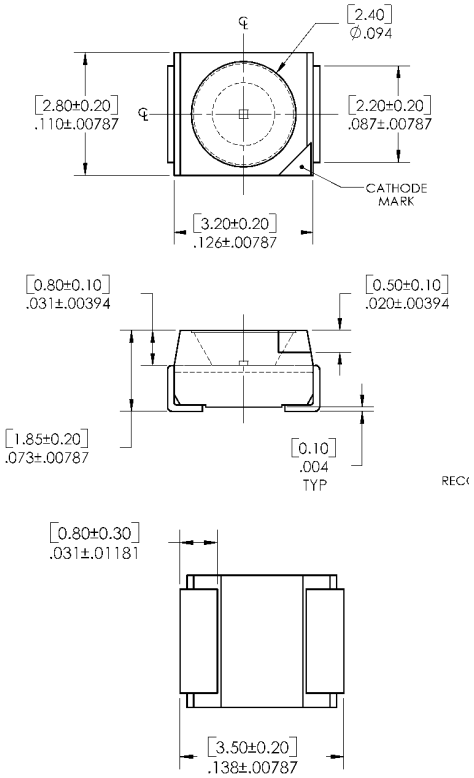
**Description:**

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.

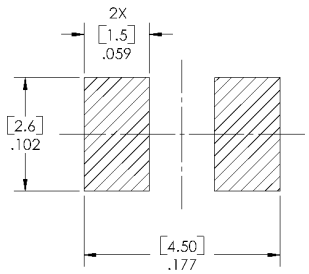
**Applications:**

- 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 | AlInGaP | Yellow | 120 | Water Clear |




**Recommended Soldering Pad**




RoHS Moisture 2a

ATTENTION
OBSERVE PRECAUTIONS FOR ELECTROSTATIC SENSITIVE DEVICES

**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** ($T_A$ = 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 ≤ 10 µs) | 1000 mA |
| Reverse Voltage ($V_R$) | 5 V |
| Current Linearity vs. Ambient Temperature | -0.5 mA/° C |
| LED Junction Temperature | 125° C |
| Power Dissipation | 82.5 mW |

**Electrical Characteristics** ($T_A$ = 25° C unless otherwise noted)

| SYMBOL | PARAMETER | MIN | TYP | MAX | UNITS | TEST CONDITIONS |
|---|---|---|---|---|---|---|
| $I_V$ | Luminous Intensity[1] | 71.5 | 120 | ---- | mcd | $I_F$ = 20 mA |
| $V_F$ | Forward Voltage[2] | ---- | 2.0 | 2.75 | V | $I_F$ = 20 mA |
| $I_R$ | Reverse Current | ---- | ---- | 10 | µA | $V_R$ = 5 V |
| 2 Θ½ | 50% Power Angle | ---- | 120 | ---- | deg | $I_F$ = 20 mA |
| $\lambda_D$ | Dominant Wavelength[3] | 582 | 589 | 594 | nm | $I_F$ = 20 mA |
| Δλ | Spectral Half Width | ---- | 25 | ---- | nm | $I_F$ = 20 mA |

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

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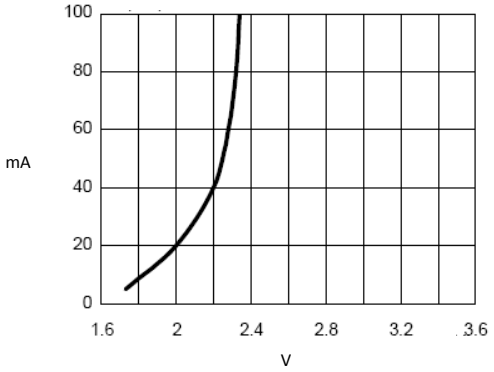
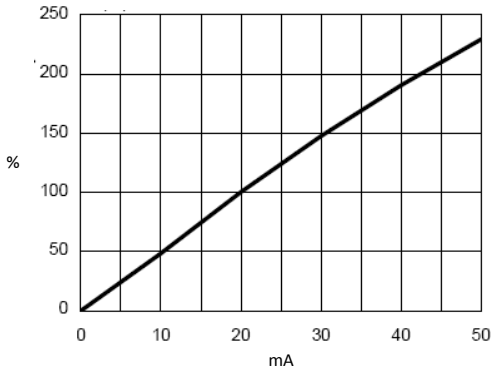
## Performance

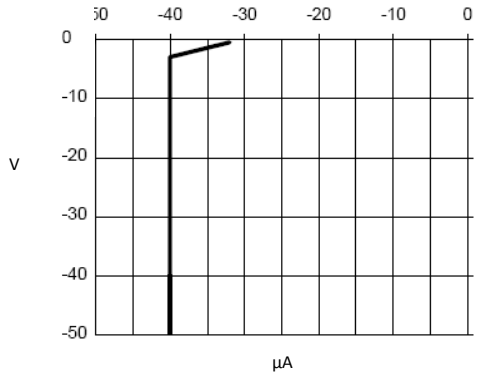
### Typical Electro-Optical Characteristics Curves



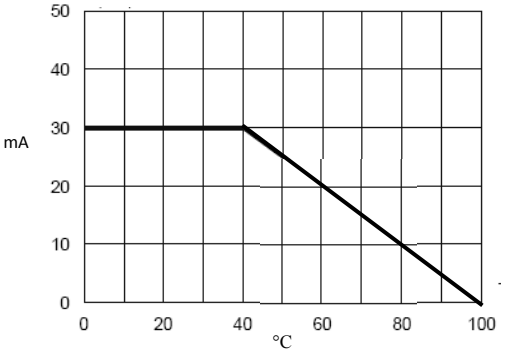

Forward Current vs Forward Voltage



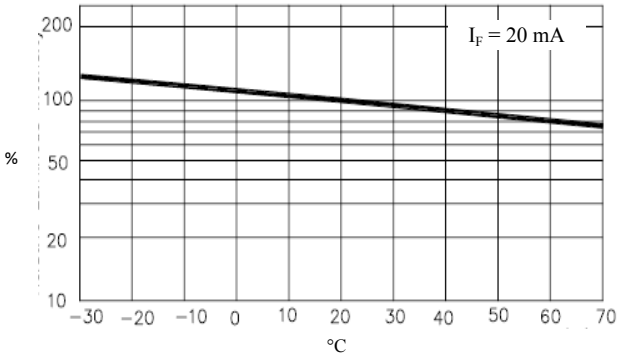

Luminous Intensity vs Forward Current



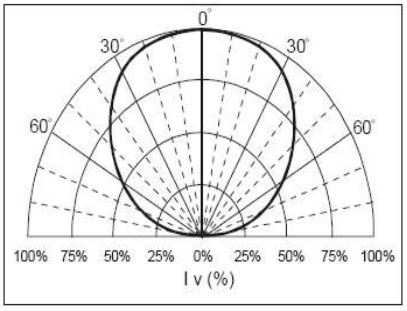

Reverse Current vs Reverse Voltage




Allowable Forward Current vs Ambient Temperature




Luminous Intensity vs Ambient Temperature




%

Beam Pattern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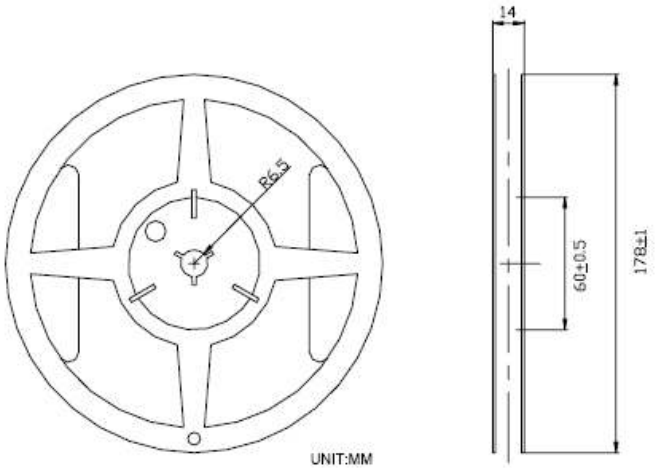
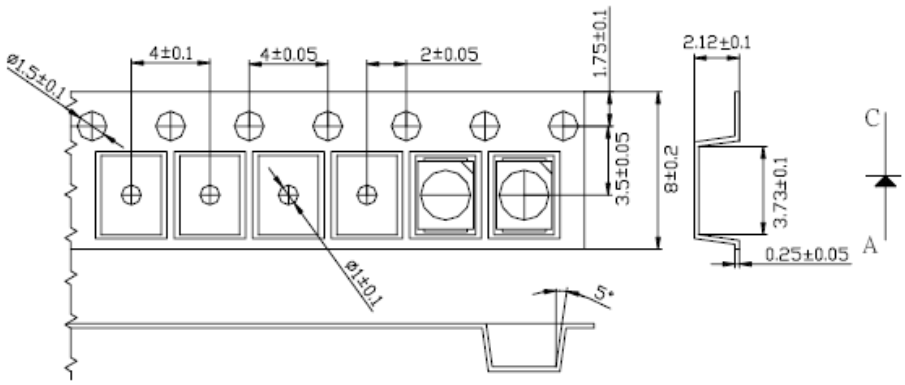
## Packaging

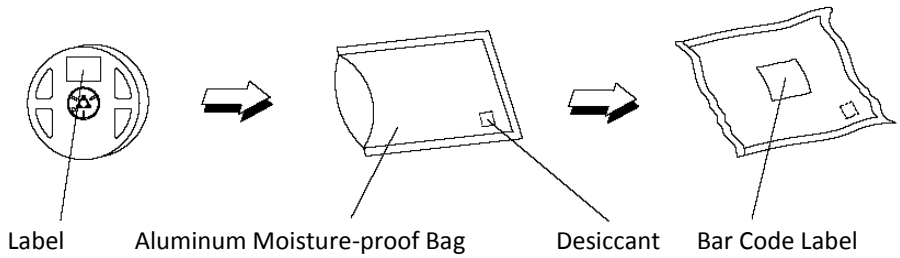



Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel




**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

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