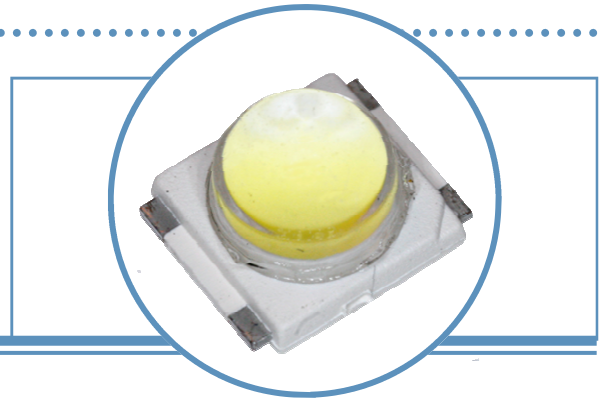


# 1-Watt SMD 6mm

## With Dome Lens

### OVSPxBCR44 Series

- Robust energy-efficient design with long operating life
- Low thermal resistance
- Exceptional spatial uniformity
- Optional optics to suit application
- Available in yellow, red and white

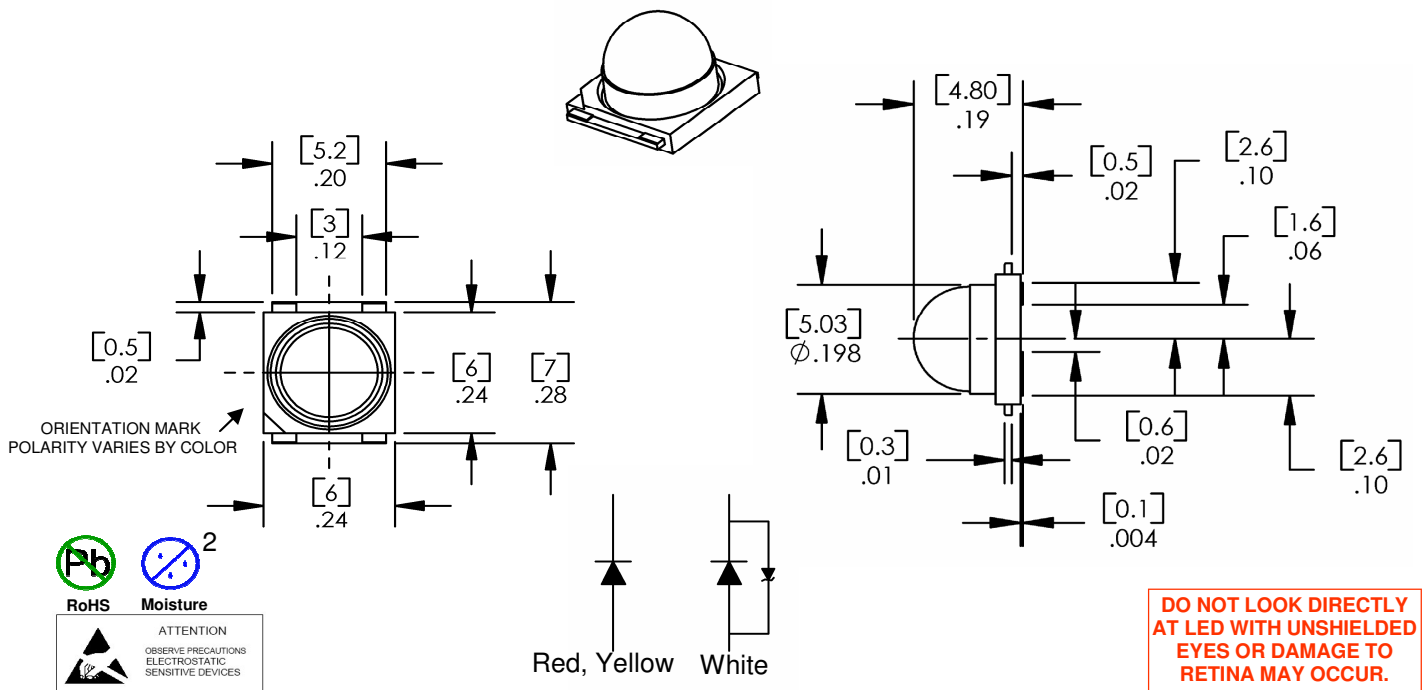


The **OVSPxBCR44 Series** is an energy-efficient packaged LED source that offers high luminance, and a long operating lifespan. These devices offer a focused viewing angle and a water-clear lens, making them highly suitable for conventional lighting and specialized applications. Optional optics are offered to suit application. Please contact OPTEK for more information.

### Applications

- Automotive exterior and interior lighting
- Architectural indoor and outdoor lighting
- General lighting
- Electronic signs and signals

Part Number	Viewing Angle	Emitted Color	Typical Luminous Flux (lm)	Typical On-Axis Intensity (cd)	Lens Color
OVSPRBCR44	40°	Red	30	37	Water Clear
OVSPYBCR44	40°	Yellow	35	45	Water Clear
OVSPWBCR44	60°	White	52	42	Water Clear
OVSPWWBCR44	60°	Warm White	40	30	Water Clear



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

# 1-Watt SMD 6mm Dome Lens

## OVSPxBCR44 Series



### Absolute Maximum Ratings $T_A = 25^\circ\text{C}$

	Red, Yellow	White	Warm White
DC Forward Current	400mA	350mA	350mA
Peak Pulsed For-	500mA	1000mA	1000mA
Reverse Voltage	12V	Not designed for reverse bias	Not designed for reverse bias
Junction Tempera-	125°C		
Power Dissipation	1200mW		
Storage and Oper-	-40° ~ +100 °C		
ESD Threshold	2000V		

Notes:

1. Pulse width  $t_p \leq 10\mu\text{s}$ , Duty cycle = 0.1
2. Thermal resistance = 20K/W for red and yellow; and 18K/W for white

### Optical and Electrical Characteristics—Red, Yellow ( $I_F = 400\text{ mA}$ , $T_A = 25^\circ\text{C}$ )

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	
$V_F$	Forward Voltage	2.2	2.5	2.8	V	
$\Phi$	Luminous Flux	Red	22	30	35	lm
		Yellow	25	35	49	lm
$I_v$	Luminous Intensity	Red	28.5	40	45	cd
		Yellow	28.5	45	56	cd
$\lambda_D$	Dominant Wavelength	Red	620	625	630	nm
		Yellow	585	589	597	nm
$I_R$	Reverse Current @ 12V	----	100	----	$\mu\text{A}$	
$2\Theta_{1/2}$	50% Power Angle	----	40	----	deg	

### Optical and Electrical Characteristics—White, Warm White ( $I_F = 350\text{ mA}$ , $T_A = 25^\circ\text{C}$ )

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	
$V_F$	Forward Voltage	----	3.6	4.0	V	
$\Phi$	Luminous Flux	White	39	52	61	lm
		Warm White	25	40	50	lm
$I_v$	Luminous Intensity	White	35.5	42	56	cd
		Warm White	9	13	18	cd
$I_R$	Reverse Current	----	10	----	$\mu\text{A}$	
$2\Theta_{1/2}$	50% Power Angle	----	60	----	deg	

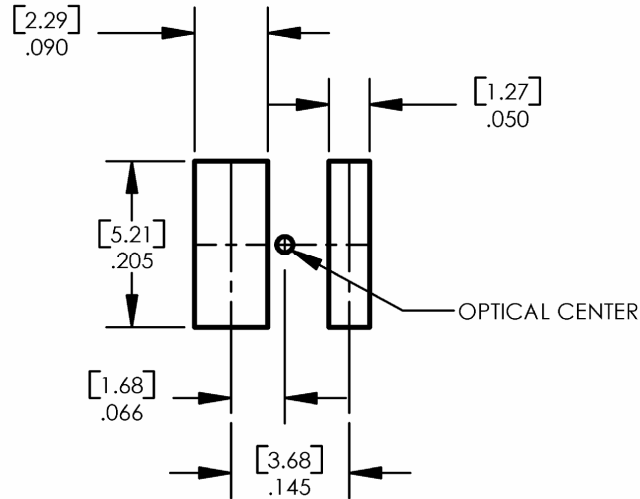
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# 1-Watt SMD 6mm Dome Lens

## OVSPxBCR44 Series

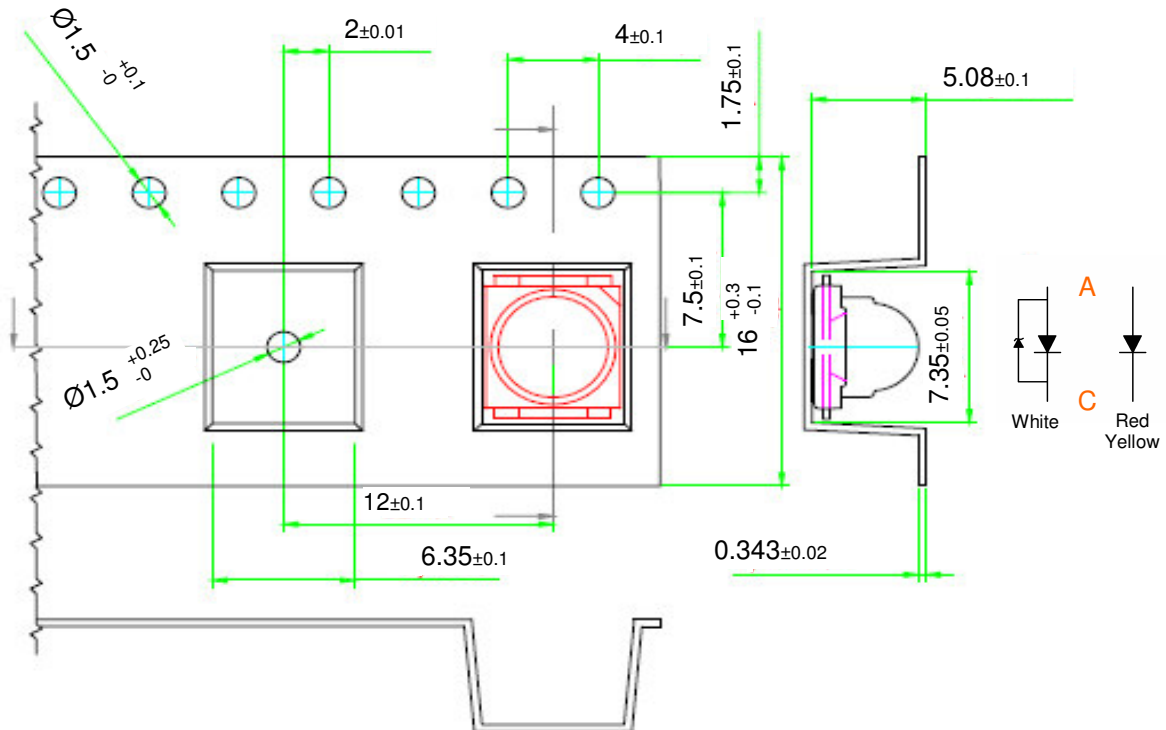
### Solder Pad Design

Note: Metal core circuit board (MCPCB) is highly recommended for high density applications. Please consult sales and marketing for additional information.



### Taping and Orientation

Loaded quantity 1000 pieces per reel

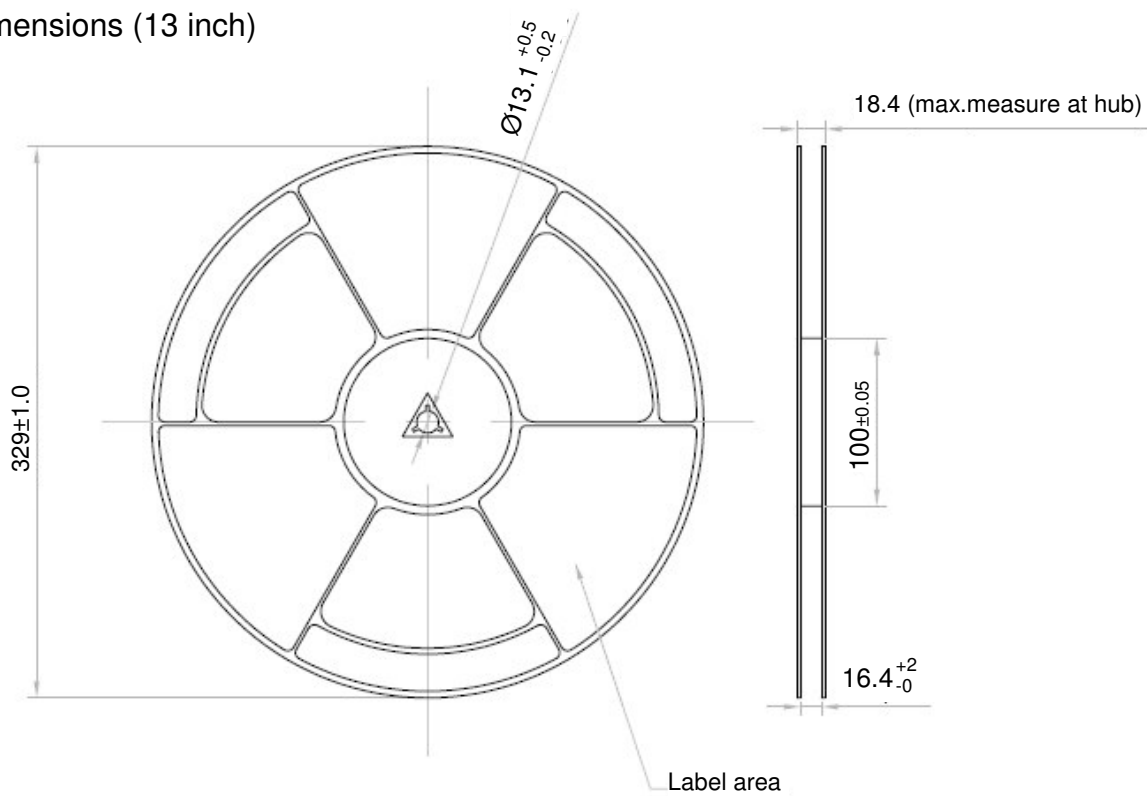


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# 1-Watt SMD 6mm Dome Lens

## OVSPxBCR44 Series

### Reel Dimensions (13 inch)



### Moisture Resistant Packaging

