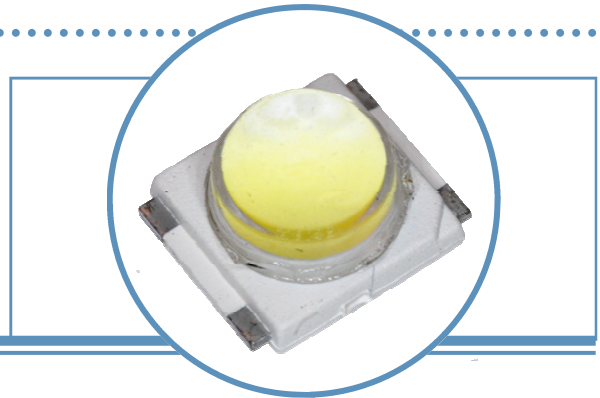


1-Watt SMD 6mm

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

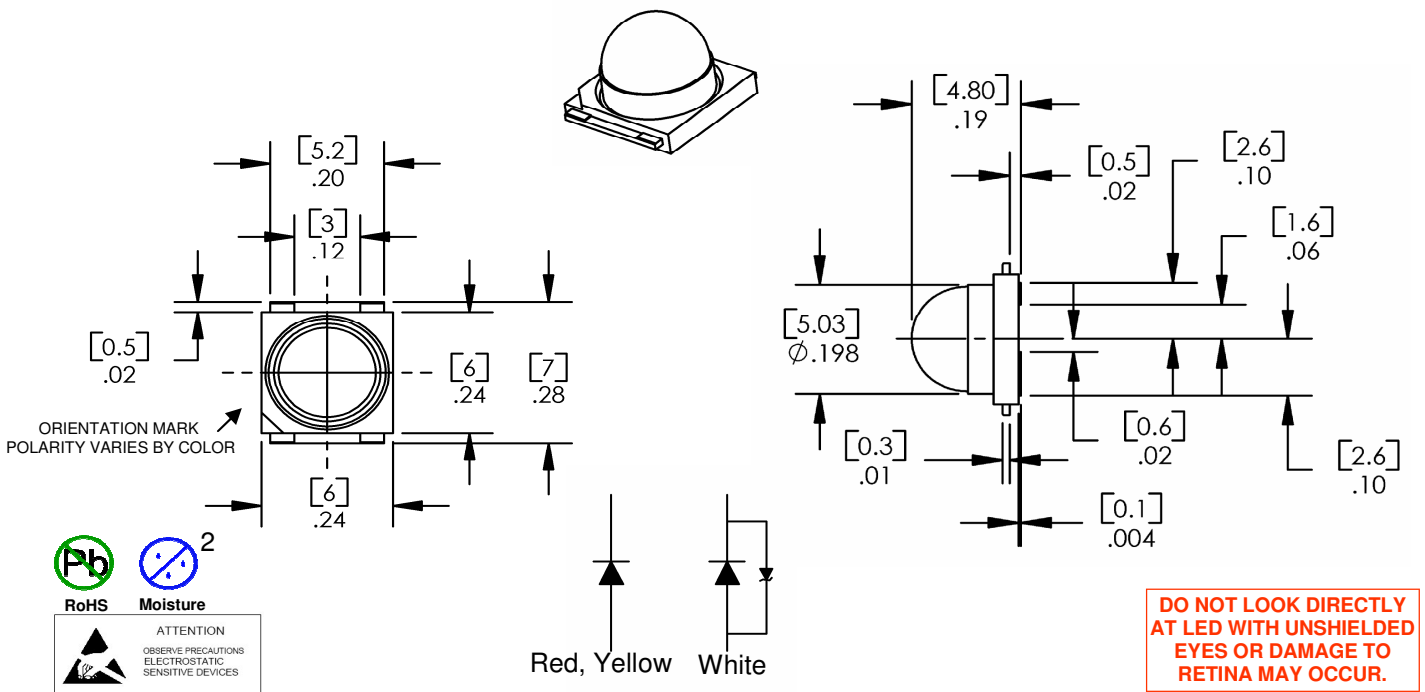


The **OVSPxBCR44 Series** is an energy-efficient packaged LED source that offers high luminance, and a long operating lifespan. These devices offer a focused viewing angle and a water-clear lens, making them highly suitable for conventional lighting and specialized applications. Optional optics are offered 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	
Φ	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
λ_D	Dominant Wavelength	Red	620	625	630	nm
		Yellow	585	589	597	nm
I_R	Reverse Current @ 12V	----	100	----	μA	
$2\Theta_{1/2}$	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	
Φ	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	----	μA	
$2\Theta_{1/2}$	50% Power Angle	----	60	----	deg	

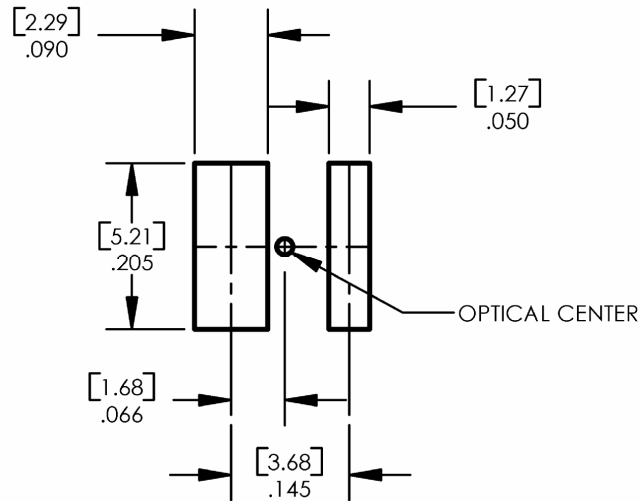
OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

1-Watt SMD 6mm Dome Lens

OVSPxBCR44 Series

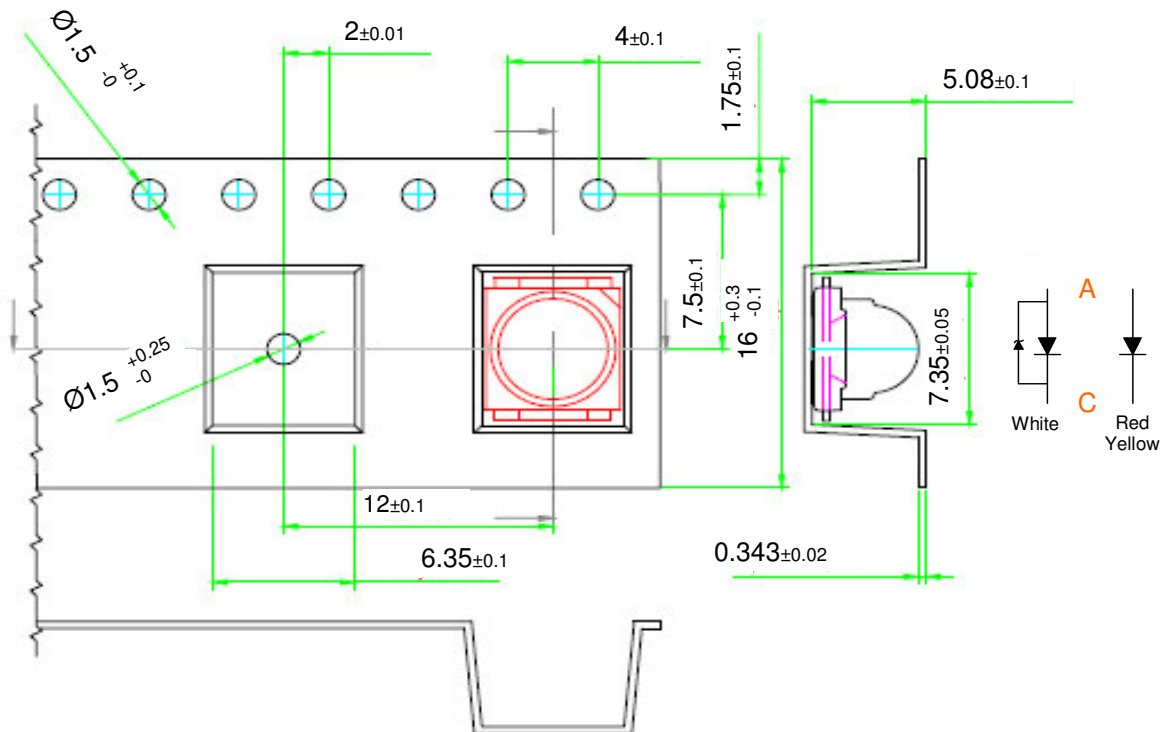
Solder Pad Design

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

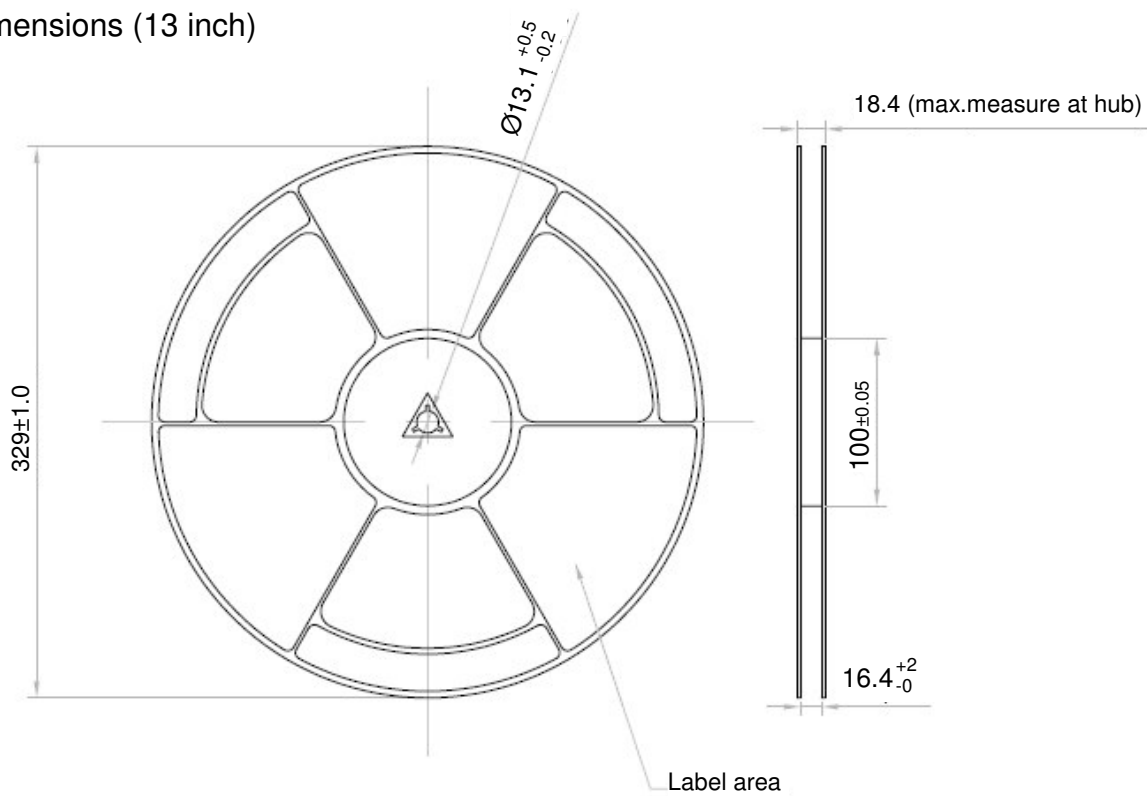


OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

1-Watt SMD 6mm Dome Lens

OVSPxBCR44 Series

Reel Dimensions (13 inch)



Moisture Resistant Packaging

