

.5-Watt SMD 6mm White (120° Viewing Angle) OVS5WBCR4



Features:

- Robust energy-efficient design with long operating life
- Low thermal resistance
- Exceptional spatial uniformity
- Optional optics to suit application

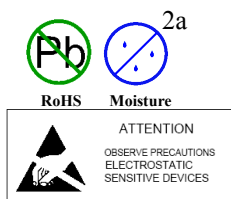
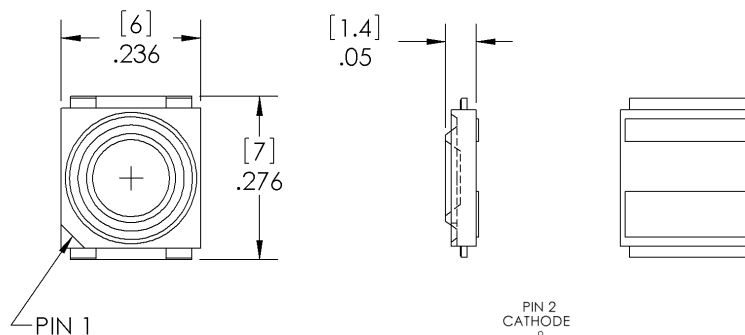
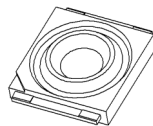


The **OVS5WBCR4** is an energy-efficient packaged LED source that offers high luminance, and a long operating lifespan. This device offers a 120° viewing angle and an ultra-low profile (1.5mm) making it highly suitable for conventional lighting and specialized applications. Optional optics are offered to suit application. Please contact OPTEK for more information.

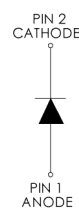
Applications

- 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)	Lens Color
OVS5WBCR4	120°	White	35	Water Clear



DIMENSIONS ARE IN INCHES [MM]
GENERAL TOLERANCES $\pm .004$ [0.10]



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

General Note

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

DC Forward Current	180mA
Peak Pulsed Forward Current ¹	500mA
Reverse Voltage	5V
Junction Temperature ²	125°C
Power Dissipation	700mW
Storage & Operating Temperature	-40 ~ +100°C
Electrostatic Discharge Classification (JEDEC-JESD22-A114F & MIL-STD-883E)	Class 2
Moisture Sensitivity Level (IPC/JEDEC K-STD-020C)	2a /672 Hrs

Notes:

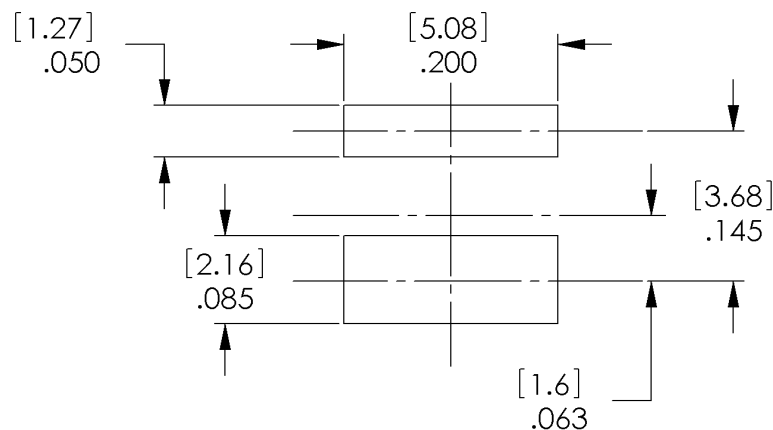
1. Pulse width $t_p \leq 10\mu\text{s}$, Duty cycle = 0.1
2. Thermal conductivity = 18K/W for white

Optical and Electrical Characteristics—White ($I_F = 150\text{ mA}$, $T_A = 25^\circ\text{C}$)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS
V_F	Forward Voltage	3.0	3.2	4.1	V
Φ	Luminous Flux	23.5	34.8	39.8	lm
I_R	Reverse Current at 5V	----	10	----	μA
$2\theta_{\frac{1}{2}}$	50% Power Angle	----	120	----	deg

Solder Pad Design

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



General Note

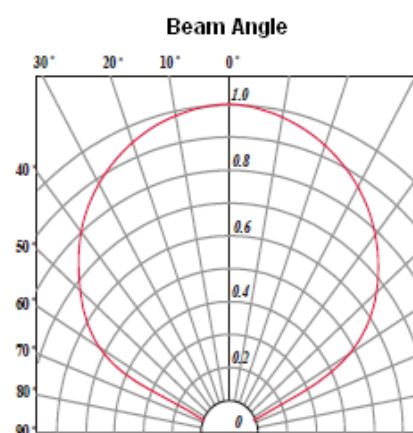
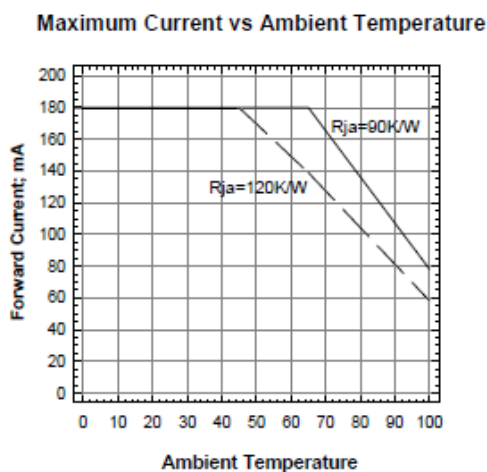
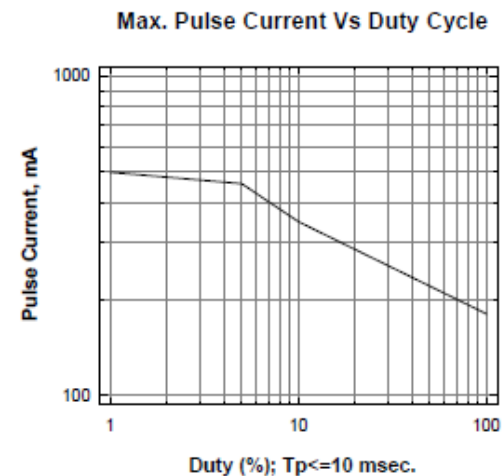
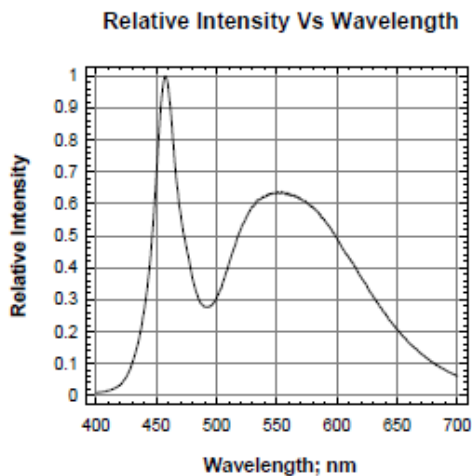
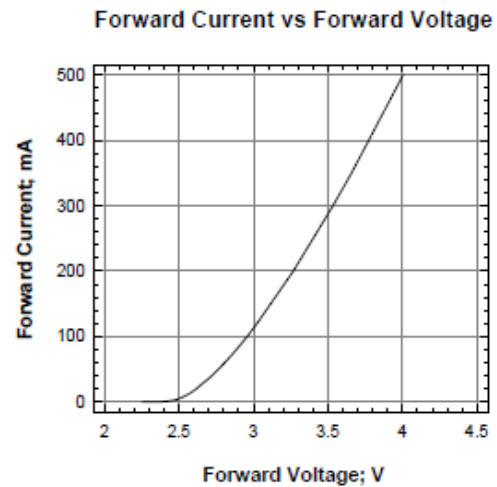
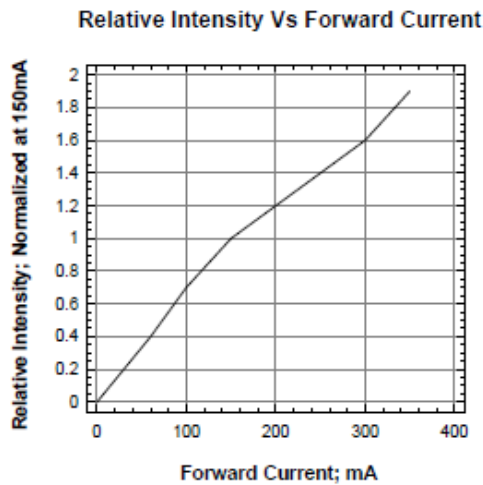
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Typical Electro-Optical Characteristics Curves—White



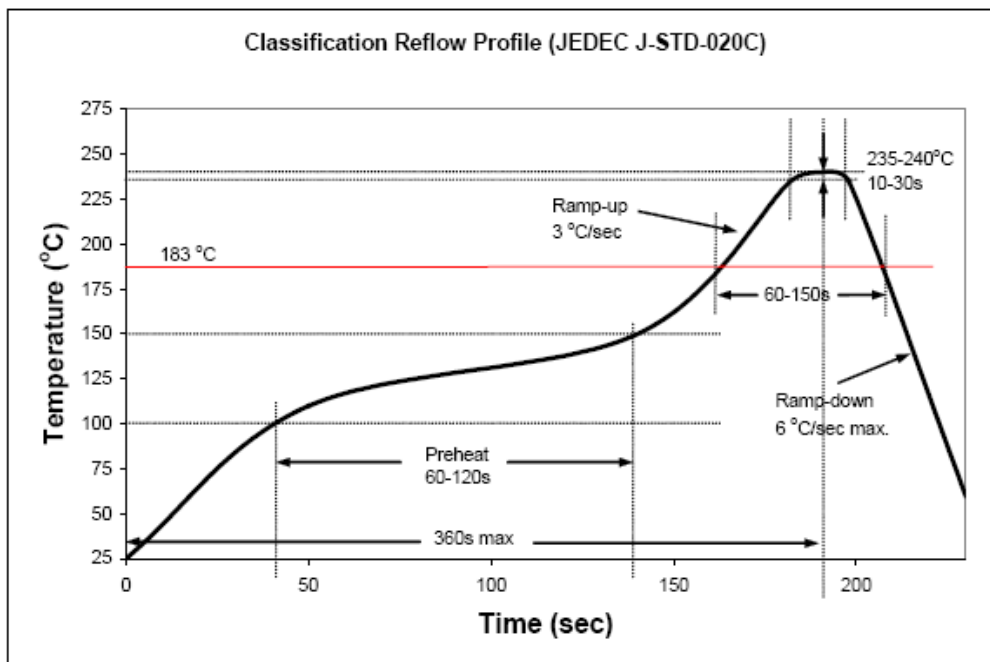
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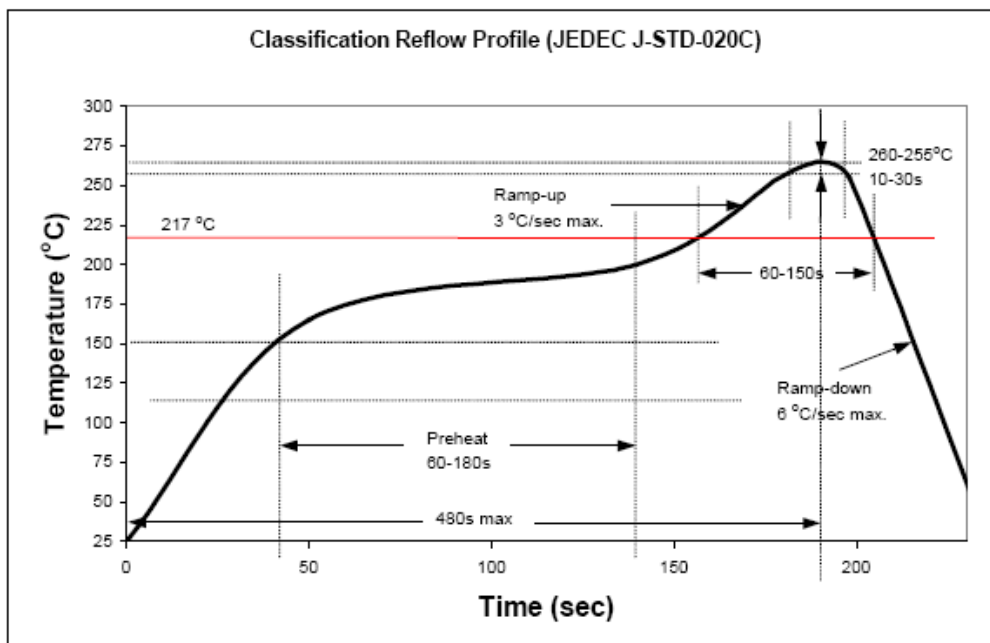
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Recommended Sn-Pb IR-Reflow Soldering Profile.



Recommended Pb Free IR-Reflow Soldering Profile.



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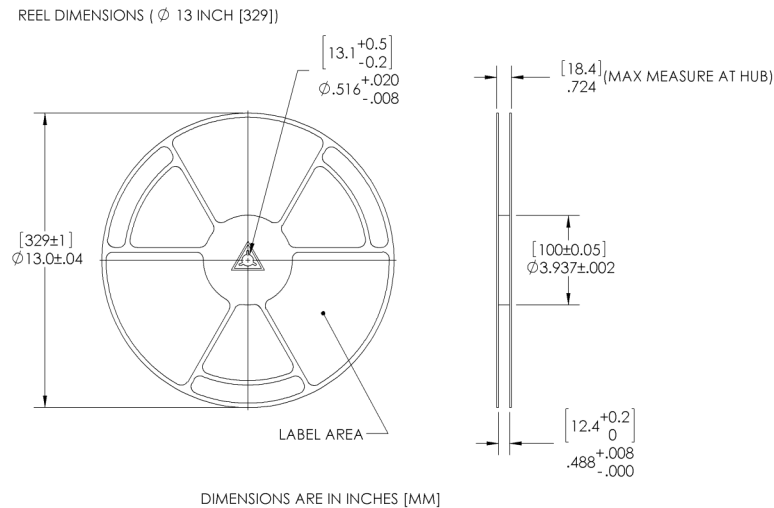
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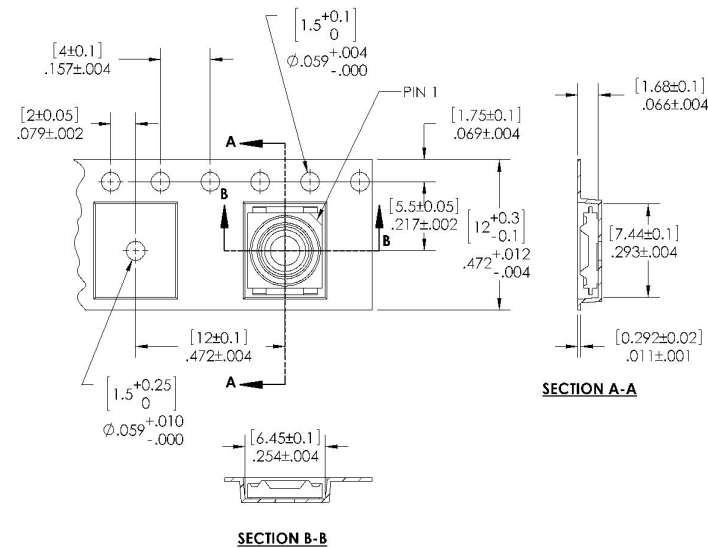


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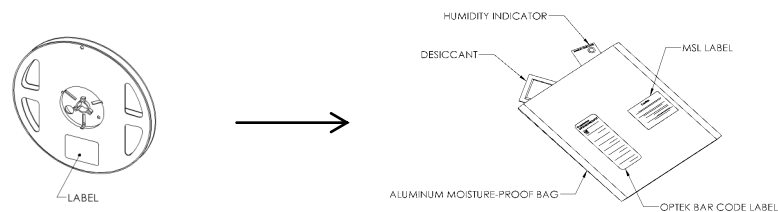
Reel Dimensions: 13 -inch reel



Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel



Moisture Resistant Packaging



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