

#### OVSRWAC2R6

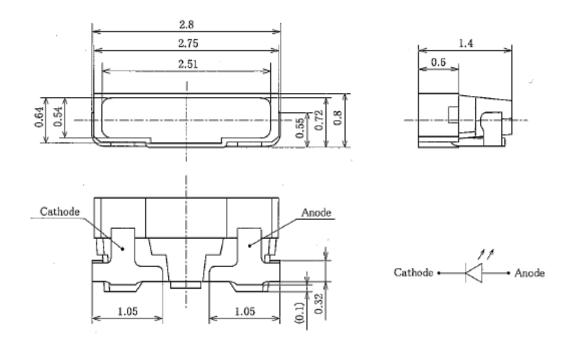
- Side-view white LED
- High optical efficiency
- Low power consumption
- Wide Viewing angles (x = 120°, y = 110°)
- Surface mount lead frame package with two pins

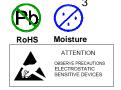


#### **Applications**

- LCD backlight
- Hand-held appliances
- Indicators
- Switch and message illumination

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVSRWAC2R6	GaN	White	2350	Water Clear





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

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## **Absolute Maximum Ratings**

 $T_A = 25^{\circ}$  C (on metal core PCB) unless otherwise noted

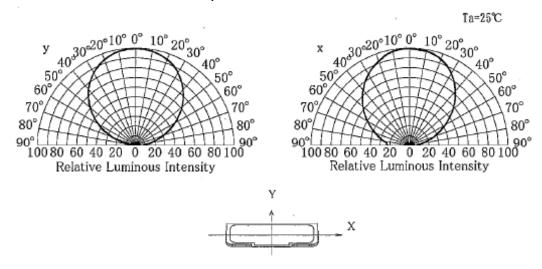
Storage Temperature Range	-40 ~ +100°C
Operating Temperature Range	-30 ~ +85°C
Reverse Voltage	5 V
Continuous Forward Current	35 mA
Forward Current Reduction	-0.43 mA/°C
Peak Forward Current (10% Duty Cycle, Pulse Width 10msec)	80 mA
Power Dissipation	120 mW
Electrostatic Discharge Classification (JEDEC-JESD22-A114F)	Class 2
Moisture Sensitivity Level (IPC / JEDEC J-STD-020C)	3 / 168 Hrs

#### **Electrical Characteristics**

 $T_A = 25^{\circ}$  C (on metal core PCB) unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I <sub>V</sub>	Luminous Intensity	2140		2490	mcd	I <sub>F</sub> = 20 mA
V <sub>F</sub>	Forward Voltage	2.8		3.0	V	I <sub>F</sub> = 20 mA
I <sub>R</sub>	Reverse Current			2.0	μA	V <sub>R</sub> = 5 V
2 0½	50% Power Angle	50% Power Angle x= y=				I <sub>F</sub> = 20 mA
х	Chromoticity Coordinates	Ponk	Ranking Table Applies			I <sub>F</sub> = 20 mA
У	Chromaticity Coordinates	Kalik	ing rable A	philes		I <sub>F</sub> = 20 mA

## **Spatial Distribution**



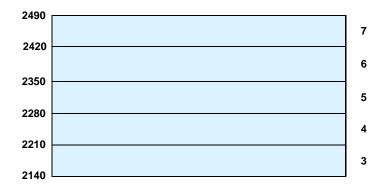
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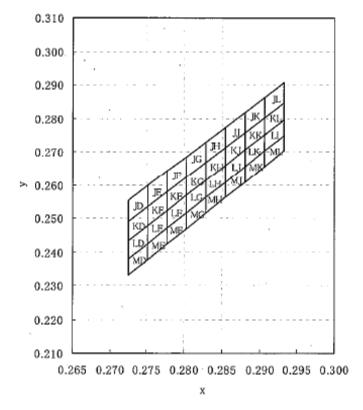
#### Standard Bins

LEDs are sorted to luminous flux  $(\Phi)$ , luminous intensity  $(I_V)$ , dominant wavelength  $(\lambda_D)$  and chromaticity coordinates (x,y) bins shown. Each reel will consist of a single intensity bin and a single color bin. Orders may be filled with any of the intensity bins or color bins listed in the following tables. Optek will not accept orders for single intensity bins nor for single color bins. For custom option inquiries, contact your local Optek sales representative.

#### **Luminous Intensity**



### **CIE Chromaticity Diagram**







## **Chromaticity Coordinates**

Rank	JD					J	E		JF				
Chromaticity	х	0.2725	0.2725	0.2751	0.2751	0.2751	0.2751	0.2777	0.2777	0.2777	0.2777	0.2803	0.2803
Coordinates	у	0.2554	0.2491	0.2536	0.2598	0.2598	0.2536	0.2580	0.2642	0.2642	0.2580	0.2625	0.2686
Rank			J	G			J	Н			J	J	
Chromaticity	Х	0.2803	0.2803	0.2829	0.2829	0.2829	0.2829	0.2855	0.2855	0.2855	0.2855	0.2881	0.2881
Coordinates	у	0.2686	0.2625	0.2669	0.2729	0.2729	0.2669	0.2713	0.2773	0.2773	0.2713	0.2758	0.2817
Rank		JK					J	L					
Chromaticity	Х	0.2881	0.2881	0.2907	0.2907	0.2907	0.2907	0.2933	0.2933				
Coordinates	у	0.2817	0.2758	0.2802	0.2861	0.2861	0.2802	0.2847	0.2905				

Rank		K	D		K	E		KF					
Chromaticity	Х	0.2725	0.2725	0.2751	0.2751	0.2751	0.2751	0.2777	0.2777	0.2777	0.2777	0.2803	0.2803
Coordinates	у	0.2491	0.2432	0.2478	0.2536	0.2536	0.2478	0.2523	0.2580	0.2580	0.2523	0.2569	0.2625
Rank			K	G			K	Н			K	J	
Chromaticity	Х	0.2803	0.2803	0.2829	0.2829	0.2829	0.2829	0.2855	0.2855	0.2855	0.2855	0.2881	0.2881
Coordinates	у	0.2625	0.2569	0.2614	0.2669	0.2669	0.2614	0.2660	0.2713	0.2713	0.2660	0.2705	0.2758
Rank		КК					K	L					
Chromaticity	Х	0.2881	0.2881	0.2907	0.2907	0.2907	0.2907	0.2933	0.2933				
Coordinates	у	0.2758	0.2705	0.2751	0.2802	0.2802	0.2751	0.2796	0.2847				

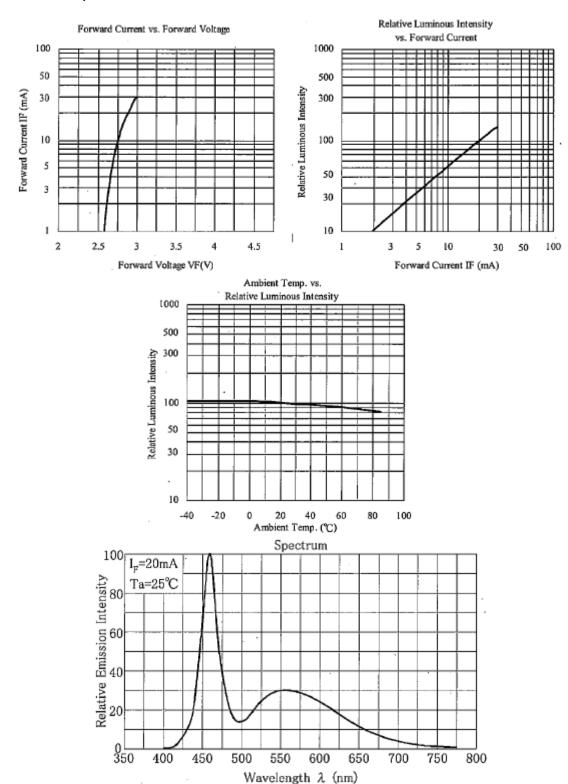
Rank		L	.D			L	E		LF					
Chromaticity	Х	0.2725	0.2725	0.2751	0.2751	0.2751	0.2751	0.2777	0.2777	0.2777	0.2777	0.2803	0.2803	
Coordinates	у	0.2432	0.2379	0.2425	0.2478	0.2478	0.2425	0.2471	0.2523	0.2523	0.2471	0.2517	0.2569	
Rank		LG					L	Н		LJ				
Chromaticity	Х	0.2803	0.2803	0.2829	0.2829	0.2829	0.2829	0.2855	0.2855	0.2855	0.2855	0.2881	0.2881	
Coordinates	у	0.2569	0.2517	0.2563	0.2614	0.2614	0.2563	0.2609	0.2660	0.2660	0.2609	0.2656	0.2705	
Rank			L	.K			L	L						
Chromaticity	Х	0.2881	0.2881	0.2907	0.2907	0.2907	0.2907	0.2933	0.2933					
Coordinates	у	0.2705	0.2656	0.2702	0.2751	0.2751	0.2702	0.2748	0.2796					

Rank		M	ID		М	E		MF						
Chromaticity	х	0.2725	0.2725	0.2751	0.2751	0.2751	0.2751	0.2777	0.2777	0.2777	0.2777	0.2803	0.2803	
Coordinates	у	0.2379	0.2330	0.2377	0.2425	0.2425	0.2377	0.2423	0.2471	0.2471	0.2423	0.2470	0.2517	
Rank	Rank		MG				М	Н		MJ				
Chromaticity	Х	0.2803	0.2803	0.2829	0.2829	0.2829	0.2829	0.2855	0.2855	0.2855	0.2855	0.2881	0.2881	
Coordinates	у	0.2517	0.2470	0.2516	0.2563	0.2563	0.2516	0.2562	0.2609	0.2609	0.2562	0.2609	0.2656	
Rank			N	IK			М	L						
Chromaticity	Х	0.2881	0.2881	0.2907	0.2907	0.2907	0.2907	0.2933	0.2933					
Coordinates	у	0.2656	0.2609	0.2655	0.2702	0.2702	0.2655	0.2702	0.2748					

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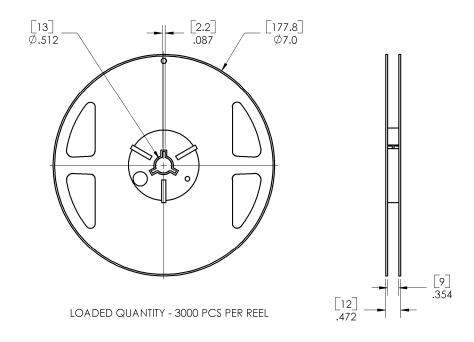
## Typical Electro-Optical Characteristics Curves



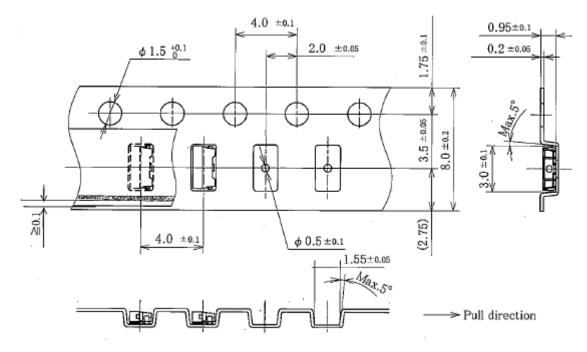




Moisture Resistant Reel Packaging: Each 7-inch reel is individually bar code labeled and sealed in an aluminum moisture proof bag with desiccant.



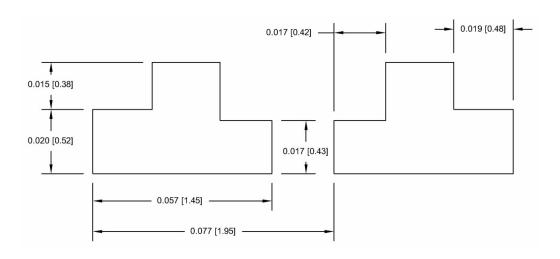
## Carrier Tape Dimensions: Loaded quantity 3000 pieces per reel



# White SMD Right Angle LED OVSRWAC2R6



Recommended Soldering Pattern (Unit: mm)



## Recommended Reflow Soldering Profile

