White SMD Right Angle LED

TT electronics
OPTEK Technology

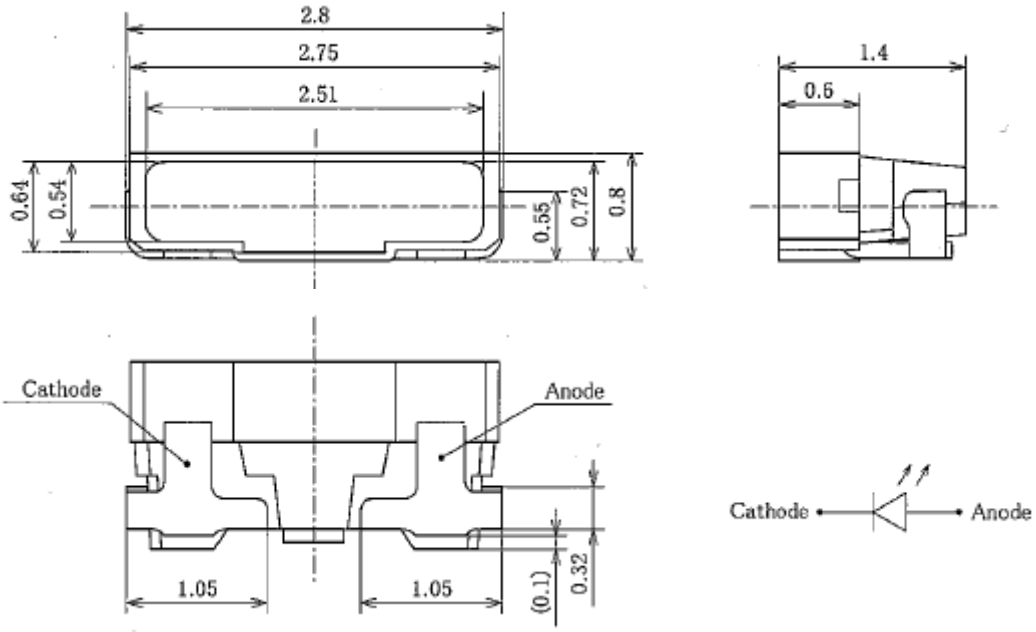
OVSRWAC2R6

- 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



RoHS

Moisture 3

ATTENTION
OBSERVE PRECAUTIONS ELECTROSTATIC SENSITIVE DEVICES

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

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

OPTEK Technology Inc. — 1645 Wallace Drive, Carrollton, Texas 75006
Phone: (972) 323-2200 or (800) 341-4747 FAX: (972) 323-2396 visibleLED@optekinc.com www.optekinc.com

Absolute Maximum Ratings

T_A = 25° C (on metal core PCB) unless otherwise noted

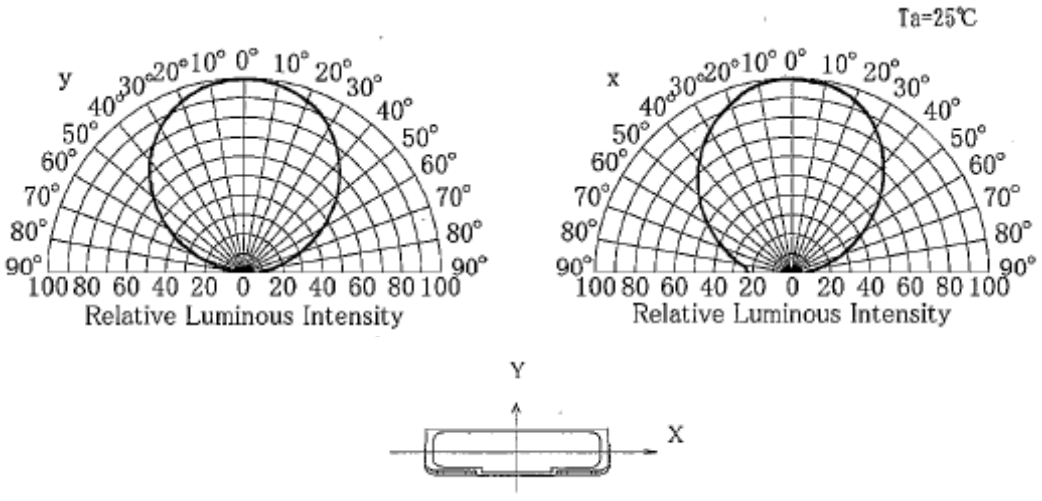
Storage Temperature Range	-40 ~ +100°C
Operating Temperature Range	-30 ~ +85°C
Reverse Voltage	5 V
Continuous Forward Current	35 mA
Forward Current Reduction	-0.43 mA/°C
Peak Forward Current (10% Duty Cycle, Pulse Width 10msec)	80 mA
Power Dissipation	120 mW
Electrostatic Discharge Classification (JEDEC-JESD22-A114F)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

Electrical Characteristics

T_A = 25° C (on metal core PCB) unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I_V	Luminous Intensity	2140	----	2490	mcd	I_F = 20 mA
V_F	Forward Voltage	2.8	----	3.0	V	I_F = 20 mA
I_R	Reverse Current	----	----	2.0	µA	V_R = 5 V
2 Θ½	50% Power Angle	----	x=120° y=110°	----	deg	I_F = 20 mA
x	Chromaticity Coordinates	Ranking Table Applies			----	I_F = 20 mA
y					----	I_F = 20 mA

Spatial Distribution



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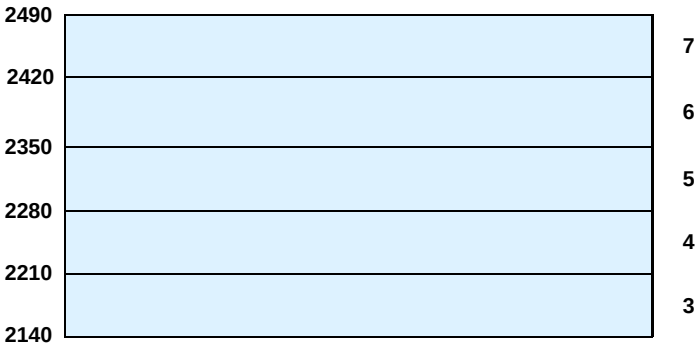
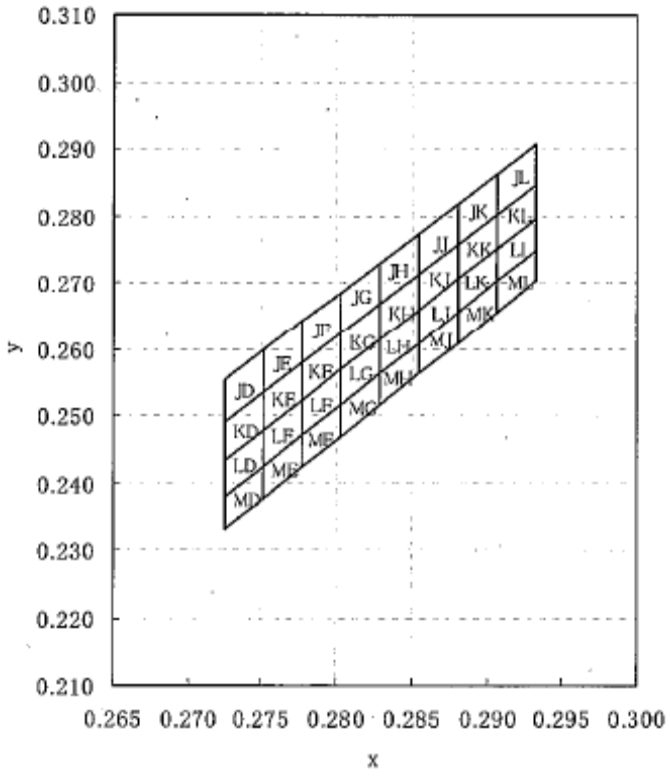
Standard Bins

LEDs are sorted to luminous flux (Φ), luminous intensity (I_V), dominant wavelength (λ_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



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Chromaticity Coordinates

Rank		JD				JE				JF			
Chromaticity Coordinates	x	0.2725	0.2725	0.2751	0.2751	0.2751	0.2751	0.2777	0.2777	0.2777	0.2777	0.2803	0.2803
	y	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		**JG**				**JH**				**JJ**			
Chromaticity Coordinates	x	0.2803	0.2803	0.2829	0.2829	0.2829	0.2829	0.2855	0.2855	0.2855	0.2855	0.2881	0.2881
	y	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**				**JL**							
Chromaticity Coordinates	x	0.2881	0.2881	0.2907	0.2907	0.2907	0.2907	0.2933	0.2933				
	y	0.2817	0.2758	0.2802	0.2861	0.2861	0.2802	0.2847	0.2905				

Rank		KD				KE				KF			
Chromaticity Coordinates	x	0.2725	0.2725	0.2751	0.2751	0.2751	0.2751	0.2777	0.2777	0.2777	0.2777	0.2803	0.2803
	y	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		**KG**				**KH**				**KJ**			
Chromaticity Coordinates	x	0.2803	0.2803	0.2829	0.2829	0.2829	0.2829	0.2855	0.2855	0.2855	0.2855	0.2881	0.2881
	y	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		**KK**				**KL**							
Chromaticity Coordinates	x	0.2881	0.2881	0.2907	0.2907	0.2907	0.2907	0.2933	0.2933				
	y	0.2758	0.2705	0.2751	0.2802	0.2802	0.2751	0.2796	0.2847				

Rank		LD				LE				LF			
Chromaticity Coordinates	x	0.2725	0.2725	0.2751	0.2751	0.2751	0.2751	0.2777	0.2777	0.2777	0.2777	0.2803	0.2803
	y	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**				**LH**				**LJ**			
Chromaticity Coordinates	x	0.2803	0.2803	0.2829	0.2829	0.2829	0.2829	0.2855	0.2855	0.2855	0.2855	0.2881	0.2881
	y	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		**LK**				**LL**							
Chromaticity Coordinates	x	0.2881	0.2881	0.2907	0.2907	0.2907	0.2907	0.2933	0.2933				
	y	0.2705	0.2656	0.2702	0.2751	0.2751	0.2702	0.2748	0.2796				

Rank		MD				ME				MF			
Chromaticity Coordinates	x	0.2725	0.2725	0.2751	0.2751	0.2751	0.2751	0.2777	0.2777	0.2777	0.2777	0.2803	0.2803
	y	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		**MG**				**MH**				**MJ**			
Chromaticity Coordinates	x	0.2803	0.2803	0.2829	0.2829	0.2829	0.2829	0.2855	0.2855	0.2855	0.2855	0.2881	0.2881
	y	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		**MK**				**ML**							
Chromaticity Coordinates	x	0.2881	0.2881	0.2907	0.2907	0.2907	0.2907	0.2933	0.2933				
	y	0.2656	0.2609	0.2655	0.2702	0.2702	0.2655	0.2702	0.2748				

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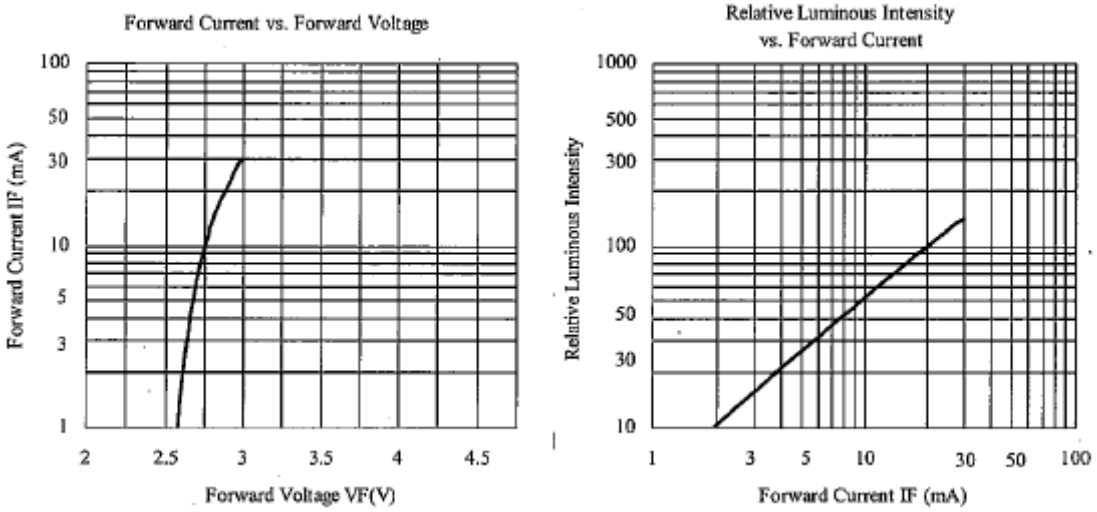
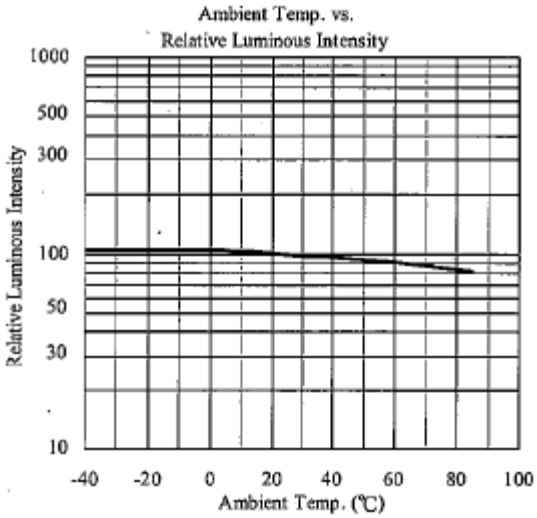
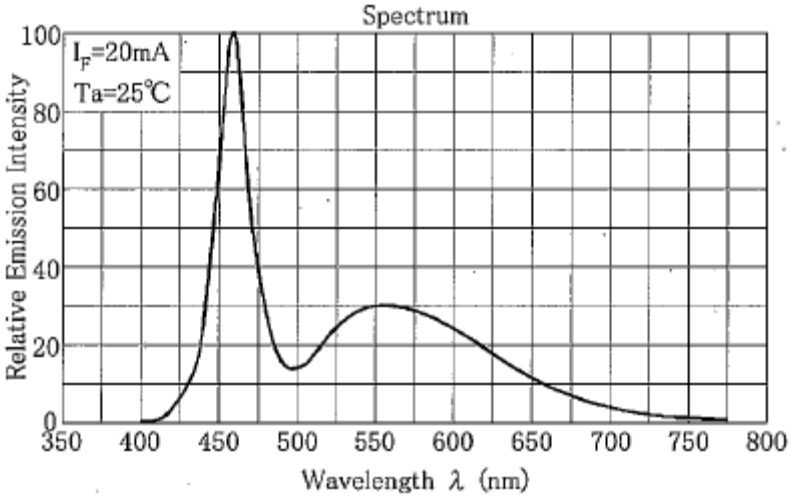
Typical Electro-Optical Characteristics Curves







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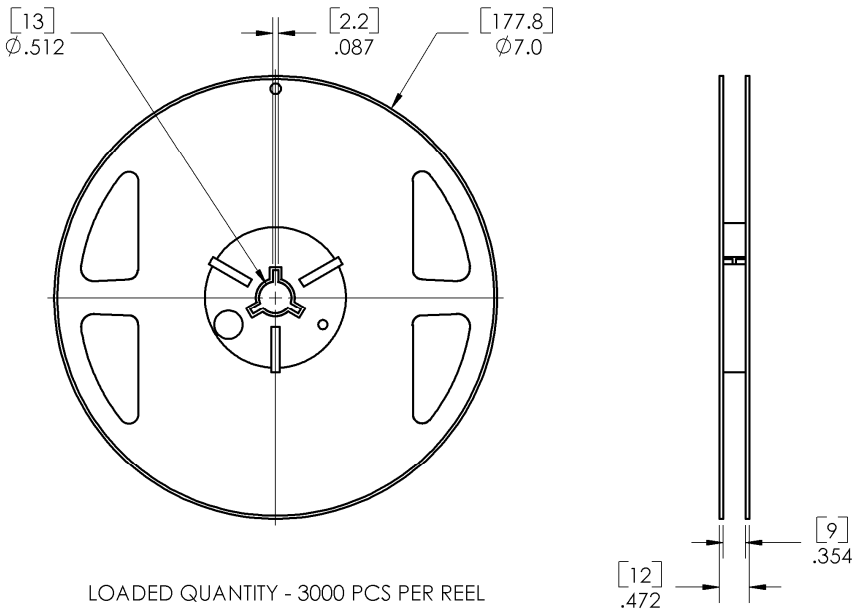
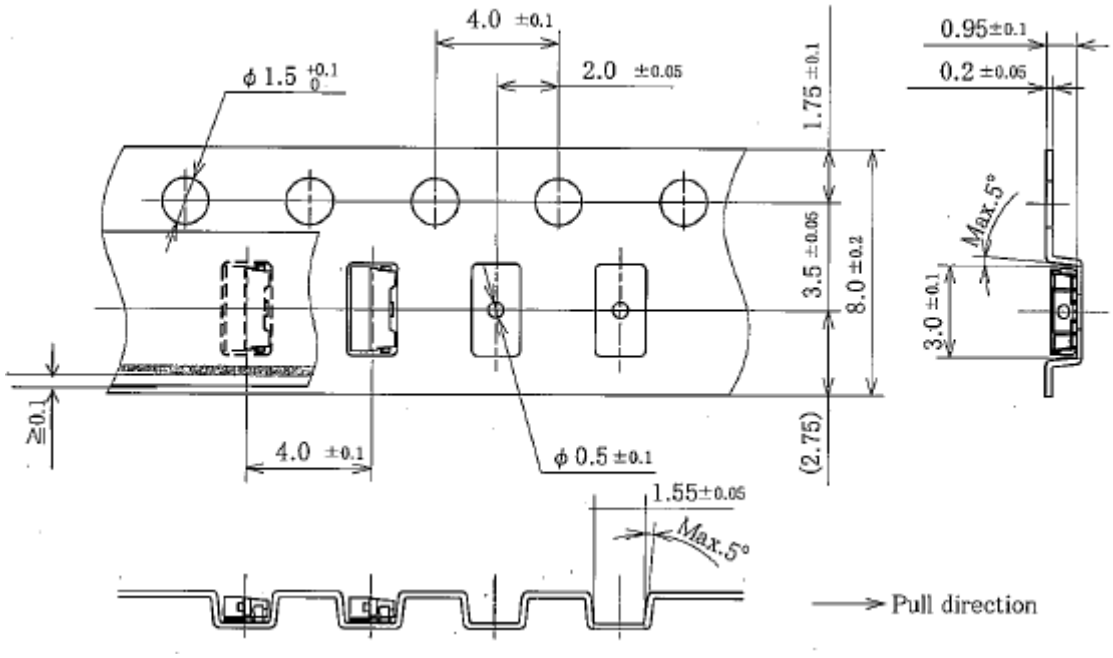
Moisture Resistant Reel Packaging: Each 7-inch reel is individually bar code labeled and sealed in an aluminum moisture proof bag with desiccant.



LOADED QUANTITY - 3000 PCS PER REEL

Carrier Tape Dimensions: Loaded quantity 3000 pieces per reel



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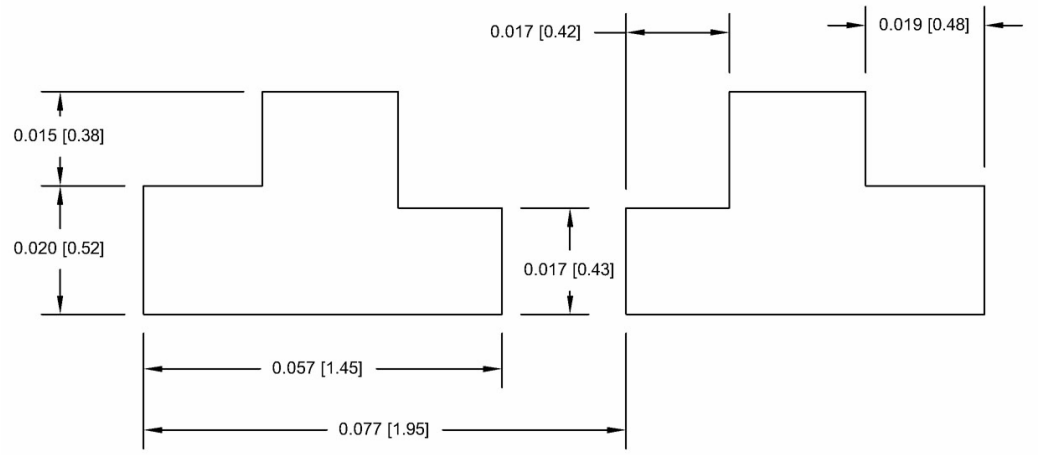
Recommended Soldering Pattern (Unit: mm)



Recommended Reflow Soldering Profile