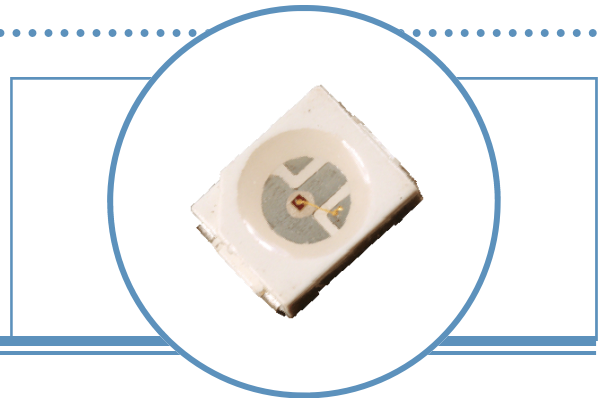


White PLCC4 Surface Mount LED (120° Viewing Angle)

OVSABCR4

- High luminous intensity
- High efficiency
- Emission color: White
- Wide variety of application possibilities

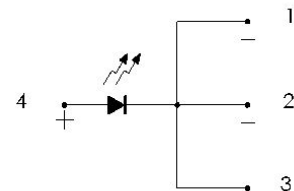
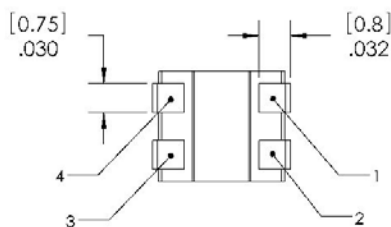
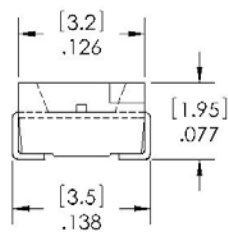
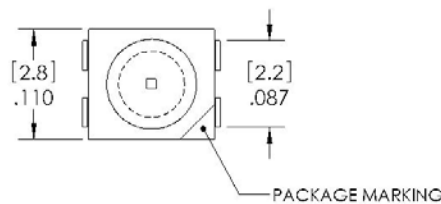


The **OVSABCR4** provides high intensity light from a surface mount package. Light output is optimized by an interior reflector and the wide viewing angle adds flexibility for applications ranging from hand-held appliances to automotive interiors.

Applications

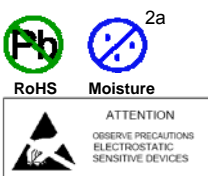
- Backlighting of full color LCD
- Automotive interior lighting
- General; Architectural and Garden lighting
- Special effect lighting
- Coupling into light guides
- Entertainment equipment

Part Number	Material	Emitted Color	Intensity Typ.	Lens Color
OVSABCR4	InGaN	White	2850 mcd	Water Clear



1, 2, 3 CATHODE 4 ANODE

DIMENSIONS ARE IN INCHES AND [MILLIMETERS].



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.

White PLCC4 Surface Mount LED

OVSAWBCR4

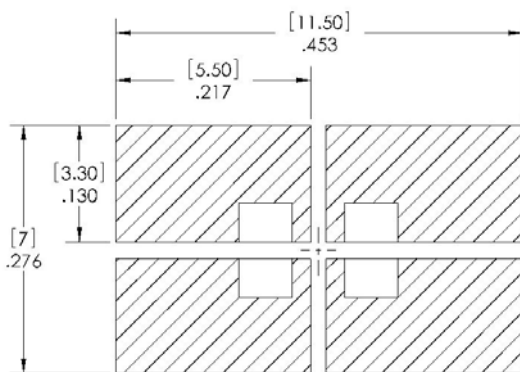


Absolute Maximum Ratings $T_A = 25^\circ\text{C}$

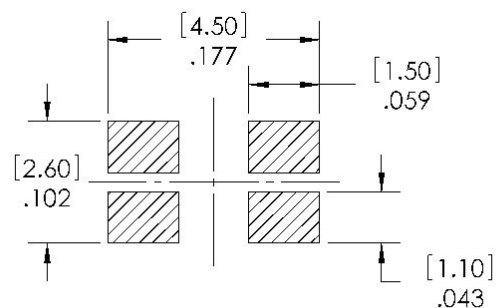
Storage Temperature Range	-40 ~ + 100°C
Operating Temperature Range	-40 ~ + 100°C
Soldering Temperature (5 second maximum)	260° C
Forward Current	50mA
Peak Forward Current (10% Duty Cycle, 1 KHz)	300 mA
Reverse Voltage	5 V
Electro Discharge Classification (JEDEC-JESD22-A114F)	Class 2
Moisture Sensitivity Level (IPC/JEDEC J-STD-020C)	2a / 672 Hrs
LED Junction Temperature	125°C
Power Dissipation	200 mW

Electrical Characteristics $T_A = 25^\circ\text{C}$

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I_V	Luminous Intensity	1800	2850	3550	mcd	$I_F = 30\text{ mA}$
V_F	Forward Voltage	2.9	3.4	4.0	V	$I_F = 30\text{ mA}$
I_R	Reverse Current	----	----	10	μA	$V_R = 5\text{ V}$
$2\theta_{1/2}$	50% Power Angle	----	120	----	deg	$I_F = 30\text{ mA}$
x	Chromaticity Coordinates	----	0.32	----	----	$I_F = 30\text{ mA}$
y		----	0.33	----	----	$I_F = 30\text{ mA}$



RECOMMENDED COPPER PATTERN



RECOMMENDED SOLDERING PAD

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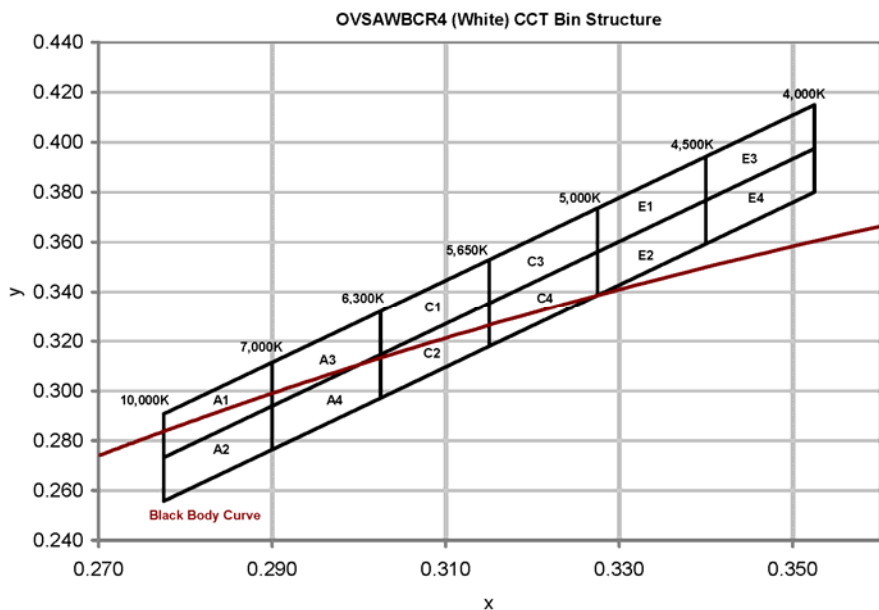
White PLCC4 Surface Mount LED

OVSAWBCR4



Standard Bins ($I_F = 30 \text{ mA}$)

LEDs are sorted to luminous intensity (I_V) and chromaticity coordinates (x, y) bins shown. Each reel consists of a single intensity bin and a single color bin. Orders are filled with all of the intensity bins or color bins listed in the following tables. Optek will not accept orders for single intensity bins or single color bins.



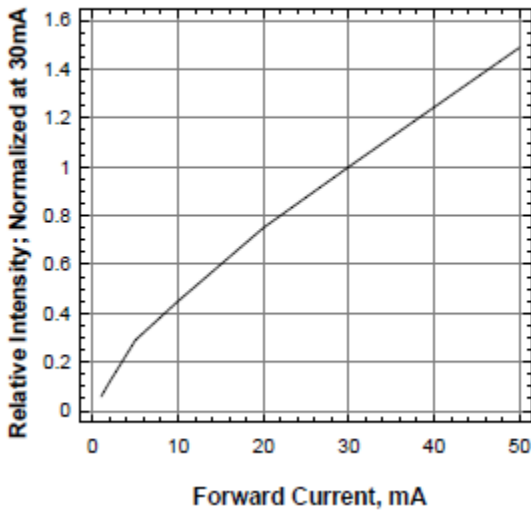
IV	Luminous Intensity		
	Code	Min (mcd)	Max (mcd)
X1	1800	2240	
X2	2240	2850	
Y1	2850	3550	

Chromaticity Coordinates (x, y)

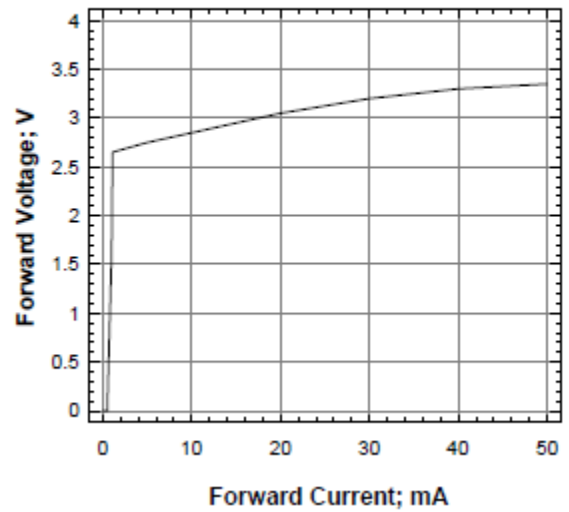
Rank	A1				A2				A3				A4			
Cx	0.2775	0.2900	0.2900	0.2775	0.2775	0.2900	0.2900	0.2775	0.2900	0.3025	0.3025	0.2900	0.2900	0.3025	0.3025	0.2900
Cy	0.2732	0.2939	0.3114	0.2907	0.2557	0.2764	0.2939	0.2732	0.2939	0.3146	0.3321	0.3114	0.2764	0.2971	0.3146	0.2939
Rank	C1				C2				C3				C4			
Cx	0.3025	0.3150	0.3150	0.3025	0.3025	0.3150	0.3150	0.3025	0.3150	0.3275	0.3275	0.3150	0.3150	0.3275	0.3275	0.3150
Cy	0.3146	0.3354	0.3529	0.3321	0.2971	0.3179	0.3354	0.3146	0.3354	0.3561	0.3736	0.3529	0.3179	0.3386	0.3561	0.3354
Rank	E1				E2				E3				E4			
Cx	0.3275	0.3400	0.3400	0.3275	0.3275	0.3400	0.3400	0.3275	0.3400	0.3525	0.3525	0.3400	0.3400	0.3525	0.3525	0.3400
Cy	0.3561	0.3768	0.3943	0.3736	0.3386	0.3593	0.3768	0.3561	0.3768	0.3975	0.4150	0.3943	0.3593	0.3800	0.3975	0.3768

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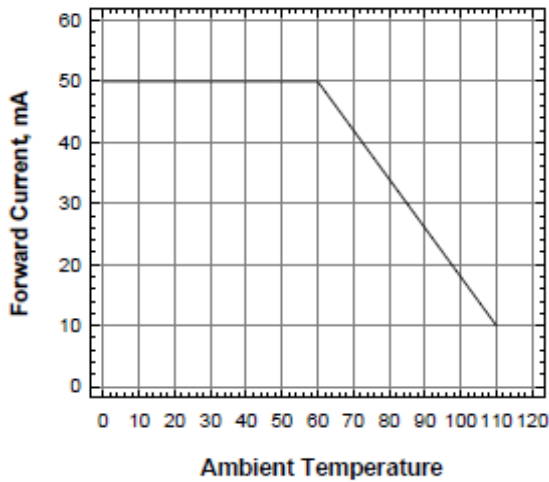
Relative Intensity Vs Forward Current



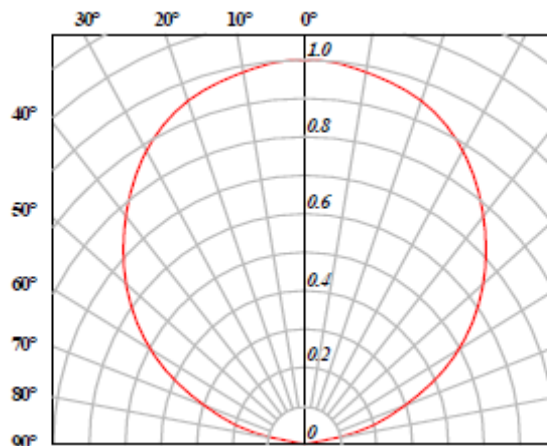
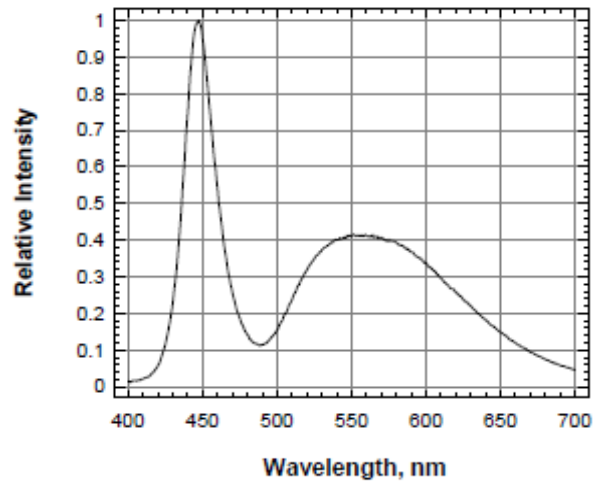
Forward Voltage Vs Forward Current



Maximum Current Vs Ambient Temperature



Relative Intensity Vs Wavelength

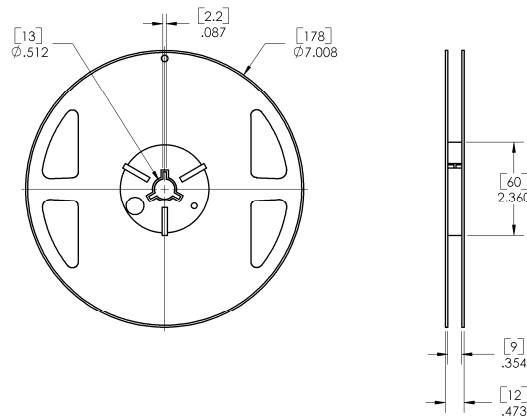


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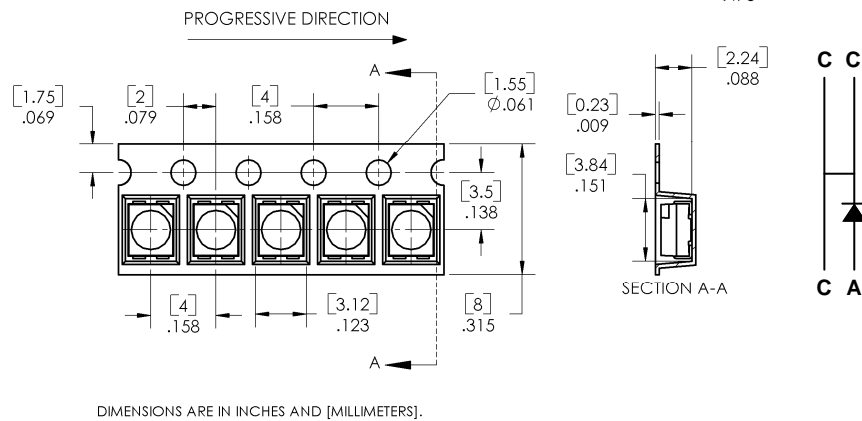
White PLCC4 Surface Mount LED

OVSAWBCR4

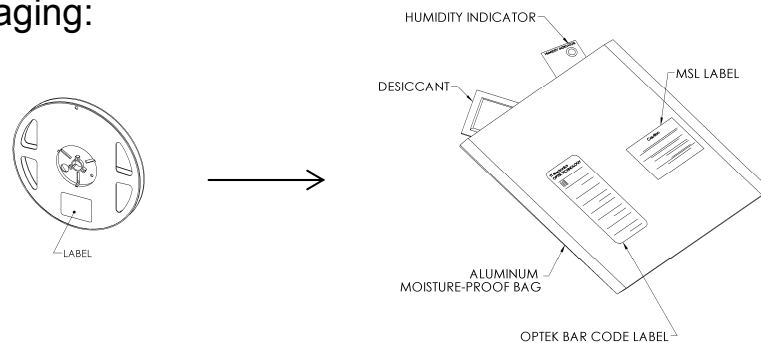
Reel Dimensions: 7-inch reel



Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel

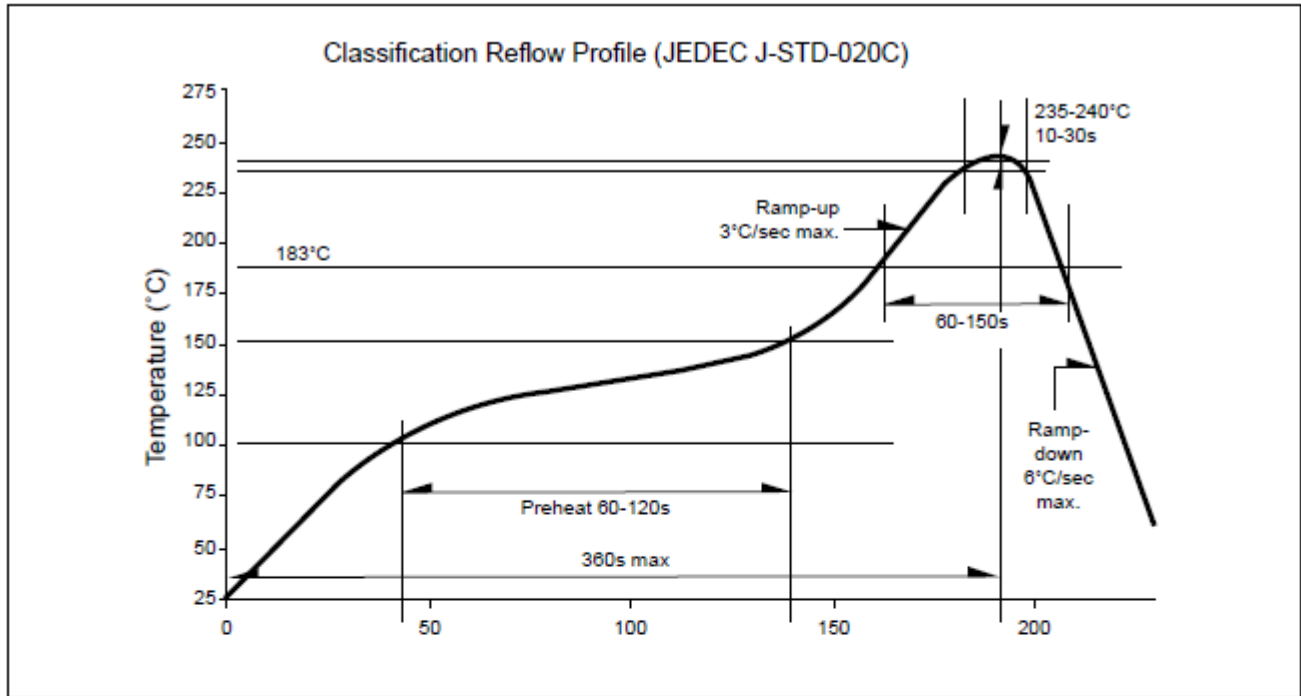


Moisture Resistant Packaging:

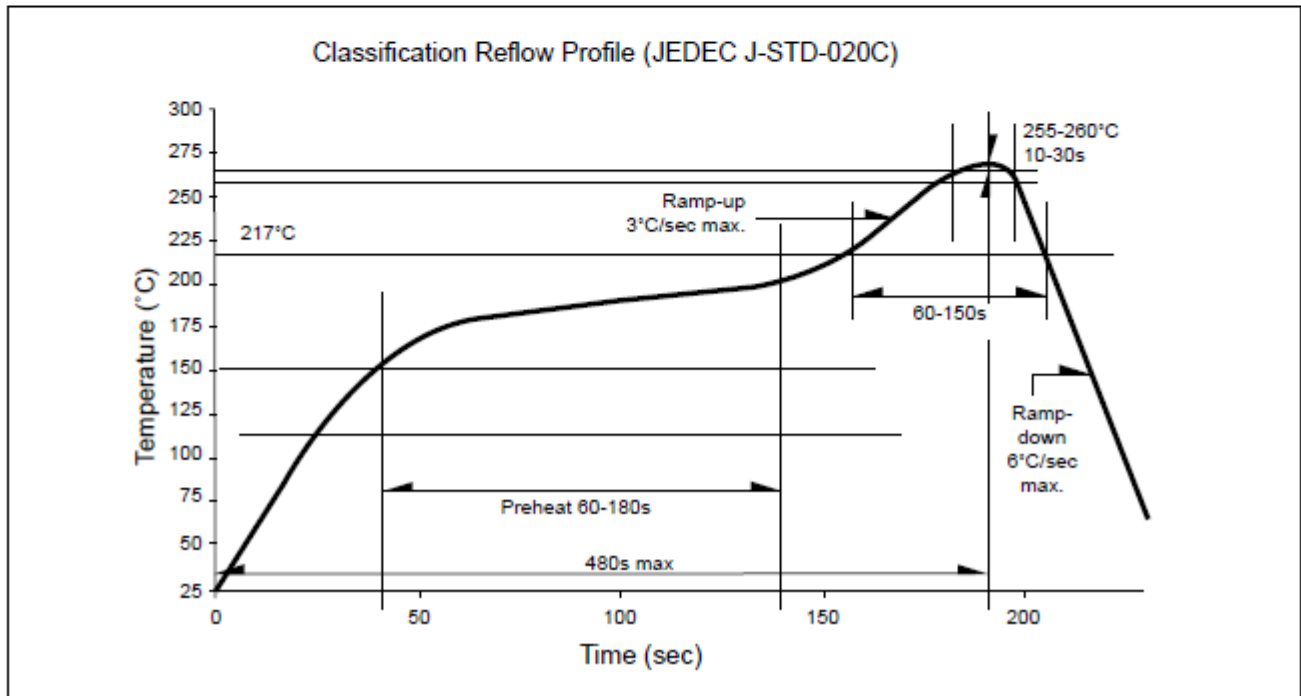


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Recommended Sn-Pb IR-Reflow Soldering Profile



Recommended Pb-free Soldering Profile



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