

PLCC Lightbar FPC R Series Datasheet



Features :

- High Brightness SMD LED
- Low Power Requirement & Energy Efficient
- Suitable for Restricted Space

Typical Applications :

- Auditorium Walkway Lighting
- Stairway Accent Lighting
- Cabinet Lighting

Specification :

- Color : ○ ● ● ● ● ● ● ●

Table of Contents

General Information	3
Absolute Maximum Ratings	4
Electric-Optical & Luminous Intensity Characteristics ($T_J=25^{\circ}\text{C}$).....	5
Mechanical Dimensions.....	9
Product Packaging Information	11
Revision History	12
About Edison Opto	12

General Information

Introduction

PLCC Lightbar FPC R is a strip of lighting module available in varying colors. Its flexible circuit board not only enables novel design thinking with bendable light source, but also offers a wide range of applications with dividable lighting segments.

Ordering Code Format

<u>6</u> X1		<u>L B R 1</u> X2		<u>X X</u> X3		<u>N</u> X4	<u>X</u> X5	<u>X X X X X X X</u> X6			
X1		X2		X3		X4		X5		X6	
Item		Series		Color		Angle		Driver		Serial No.	
6	Module	LBR1	FPC	CW	Cool White	N	120	I	CV 12V	000000x	--
				NW	Neutral White			J	CV 24V		
				WW	Warm White						
				RX	Red						
				TX	Green						
				BX	Blue						

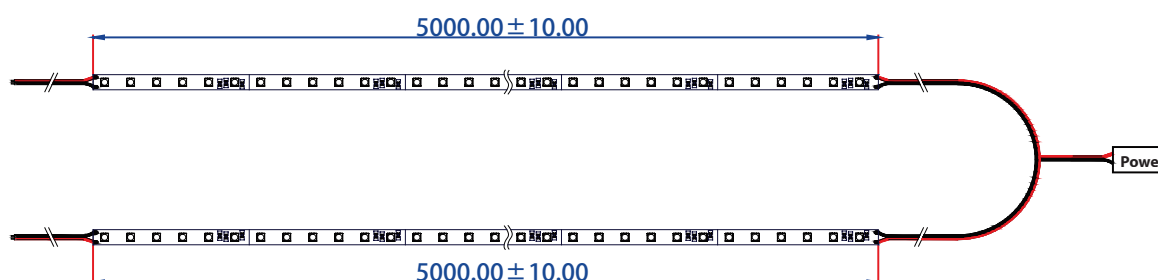
Absolute Maximum Ratings

Parameter	Symbol	Value	Units
LED junction Temperature	T_j	125	°C
Operating Temperature	T_{opr}	-20 ~ +85	°C
Storage Temperature	T_s	-20 ~ +85	°C
Number of FPC Connection	-	5	M

Absolute maximum ratings ($T_a=25^{\circ}\text{C}$)

Notes:

1. Proper current derating must be observed to maintain junction temperature below the maximum at all time.
2. LEDs are not designed to be driven in reverse bias.
3. Strongly recommended one power connection one set FP, If over two set FPC recommended connection two power in front FPC and end FPC (Drawing).



Electric-Optical & Luminous Intensity Characteristics (T_j=25°C)

Electric-Optical characteristic for 6LBR1xxNJ0000001 Series (3528)

Order Code	Color	CCT(K/nm)	Number of LEDs	Power (W)	Forward Current (mA)	Input Voltage (V DC)	Radiance Angle
6LBR1CWNJ0000001	Cool White	6000K	480	28.8~38.4	1200~1600	24	120°
6LBR1NWNJ0000001	Neutral White	4100K	480	28.8~38.4	1200~1600	24	120°
6LBR1WWNJ0000001	Warm White	3050K	480	28.8~38.4	1200~1600	24	120°
6LBR1RXNJ0000001	Red	620~630nm	480	28.8~38.4	1200~1600	24	120°
6LBR1TXNJ0000001	Green	520~535nm	480	28.8~38.4	1200~1600	24	120°
6LBR1BXNJ0000001	Blue	465~475nm	480	28.8~38.4	1200~1600	24	120°

Notes:

1. CCT is measured with an accuracy of $\pm 10\%$.
2. Forward Current is measured with an accuracy of $\pm 10\%$.

Luminous Intensity Characteristic for 6LBR1xxNJ0000001 Series (3528)

Order Code	Color	Emitter Luminous intensity Typ. (mcd)	Emitter Luminous Flux Typ. (lm)
6LBR1CWNJ0000001	Cool White	2400	7
6LBR1NWNJ0000001	Neutral White	2300	6.5
6LBR1WWNJ0000001	Warm White	2100	6
6LBR1RXNJ0000001	Red	500	1.6
6LBR1TXNJ0000001	Green	1200	3.6
6LBR1BXNJ0000001	Blue	300	0.8

Note:

Flux is measured with an accuracy of $\pm 10\%$.

Electric-Optical characteristic for 6LBR1xxNI0000001 Series (3528)

Order Code	Color	CCT(K)	Number of LEDs	Power (W)	Forward Current (mA)	Input Voltage (V DC)	Radiance Angle
6LBR1CWN10000001	Cool White	6000K	300	14.4~20.4	1200~1700	12	120°
6LBR1NWN10000001	Neutral White	4100K	300	14.4~20.4	1200~1700	12	120°
6LBR1WWN10000001	Warm White	3050K	300	14.4~20.4	1200~1700	12	120°
6LBR1RXN10000001	Red	620~630nm	300	14.4~20.4	1200~1700	12	120°
6LBR1TXN10000001	Green	520~535nm	300	14.4~20.4	1200~1700	12	120°
6LBR1BXN10000001	Blue	465~475nm	300	14.4~20.4	1200~1700	12	120°

Notes :

1. CCT is measured with an accuracy of $\pm 10\%$
2. Forward Current is measured with an accuracy of $\pm 10\%$

Luminous Intensity Characteristic for LBR1xxNI0000001 Series (3528)

Order Code	Color	Emitter Luminous intensity Typ. (mcd)	Emitter Luminous Flux Typ. (lm)
6LBR1CWN10000001	Cool White	2400	7
6LBR1NWN10000001	Neutral White	2300	6.5
6LBR1WWN10000001	Warm White	2100	6
6LBR1RXN10000001	Red	500	1.6
6LBR1TXN10000001	Green	1200	3.6
6LBR1BXN10000001	Blue	300	0.8

Note:

Flux is measured with an accuracy of $\pm 10\%$.

Electric-Optical characteristic for 6LBR1xxNI0000002 Series (5050)

Order Code	Color	CCT(K)	Number of LEDs	Power (W)	Forward Current (mA)	Input Voltage (V DC)	Radiance Angle
6LBR1CWN10000002	Cool White	6000K	300	25.2~36	2100~3000	12	120°
6LBR1NWN10000002	Neutral White	4100K	300	25.2~36	2100~3000	12	120°
6LBR1WWN10000002	Warm White	3050K	300	25.2~36	2100~3000	12	120°
6LBR1RXN10000002	Red	620~630nm	300	25.2~36	2100~3000	12	120°
6LBR1TXN10000002	Green	520~535nm	300	25.2~36	2100~3000	12	120°
6LBR1BXN10000002	Blue	465~475nm	300	25.2~36	2100~3000	12	120°

Notes:

1. CCT is measured with an accuracy of $\pm 10\%$
2. Forward Current is measured with an accuracy of $\pm 10\%$

Luminous Intensity Characteristic for 6LBR1xxNI0000002 Series (5050)

Order Code	Color	Emitter Luminous intensity Typ. (mcd)	Emitter Luminous Flux Typ. (lm)
6LBR1CWN10000002	Cool White	6300	19
6LBR1NWN10000002	Neutral White	5600	17
6LBR1WWN10000002	Warm White	5000	15
6LBR1RXN10000002	Red	1600	4.8
6LBR1TXN10000002	Green	3500	10.9
6LBR1BXN10000002	Blue	900	2.9

Note:

Flux is measured with an accuracy of $\pm 10\%$.

Electric-Optical characteristic for 6LBR1M1NI0000001 Series (5050)

Order Code	Color	Input Voltage (V DC)	Number of LEDs	Power (W)	Forward Current (mA)	Input Voltage (V DC)	Radiance Angle
6LBR1M1NI0000001	Red	12	300	14.4~20.4	1200~1700	12	120°
	Green	12	300	14.4~20.4	1200~1700	12	120°
	Blue	12	300	14.4~20.4	1200~1700	12	120°

Note:

Forward Current is measured with an accuracy of $\pm 10\%$

Luminous Intensity Characteristic for 6LBR1M1NI0000001 Series (5050)

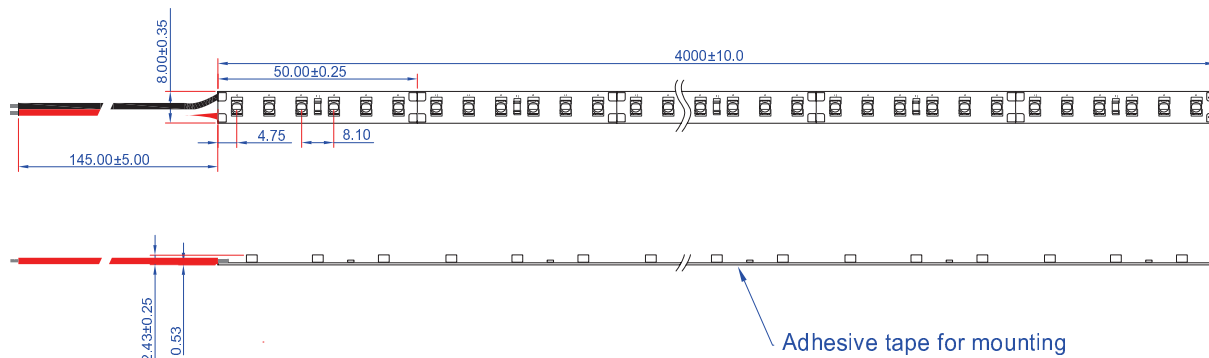
Order Code	Color	Emitter Luminous intensity Typ. (mcd)	Emitter Luminous Flux Typ. (lm)
6LBR1M1NI0000001	Red	500	1.6
	Green	1200	3.6
	Blue	300	0.8

Note:

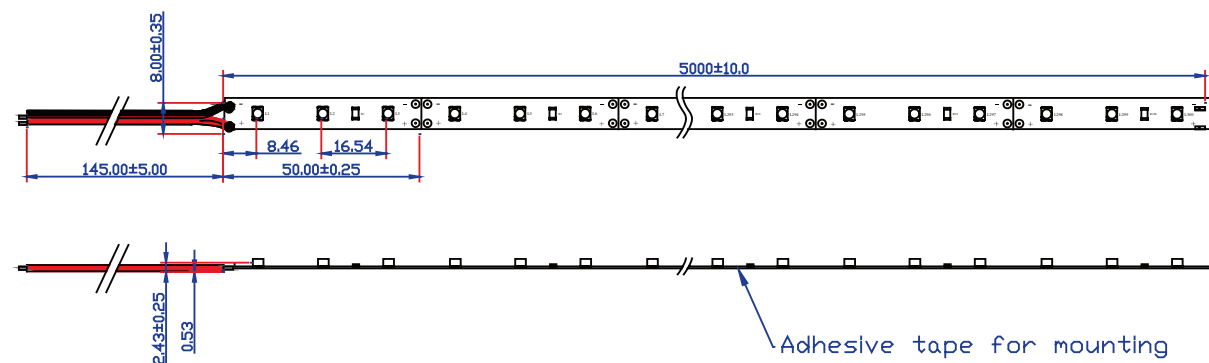
Flux is measured with an accuracy of $\pm 10\%$.

Mechanical Dimensions

6LBR1xxNJ0000001 Series Dimensions (3528)



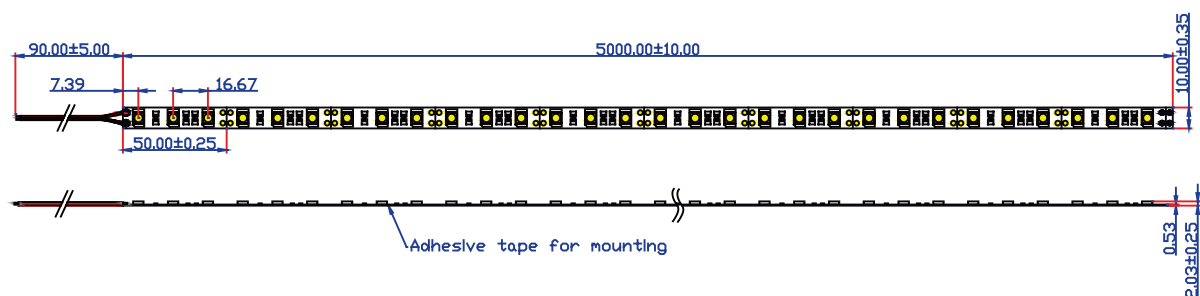
6LBR1xxNI0000001 Series Dimensions (3528)



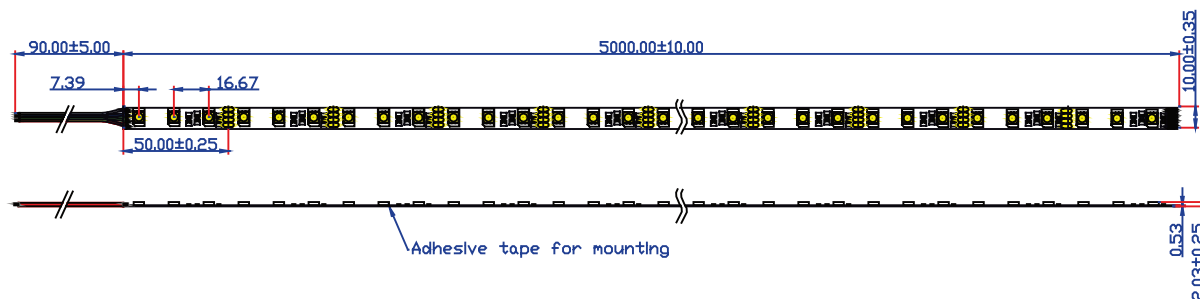
Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.20 mm

6LBR1xxNI0000002 Series Dimensions (5050)



6LBR1M1NI0000001 Series Dimensions (5050)



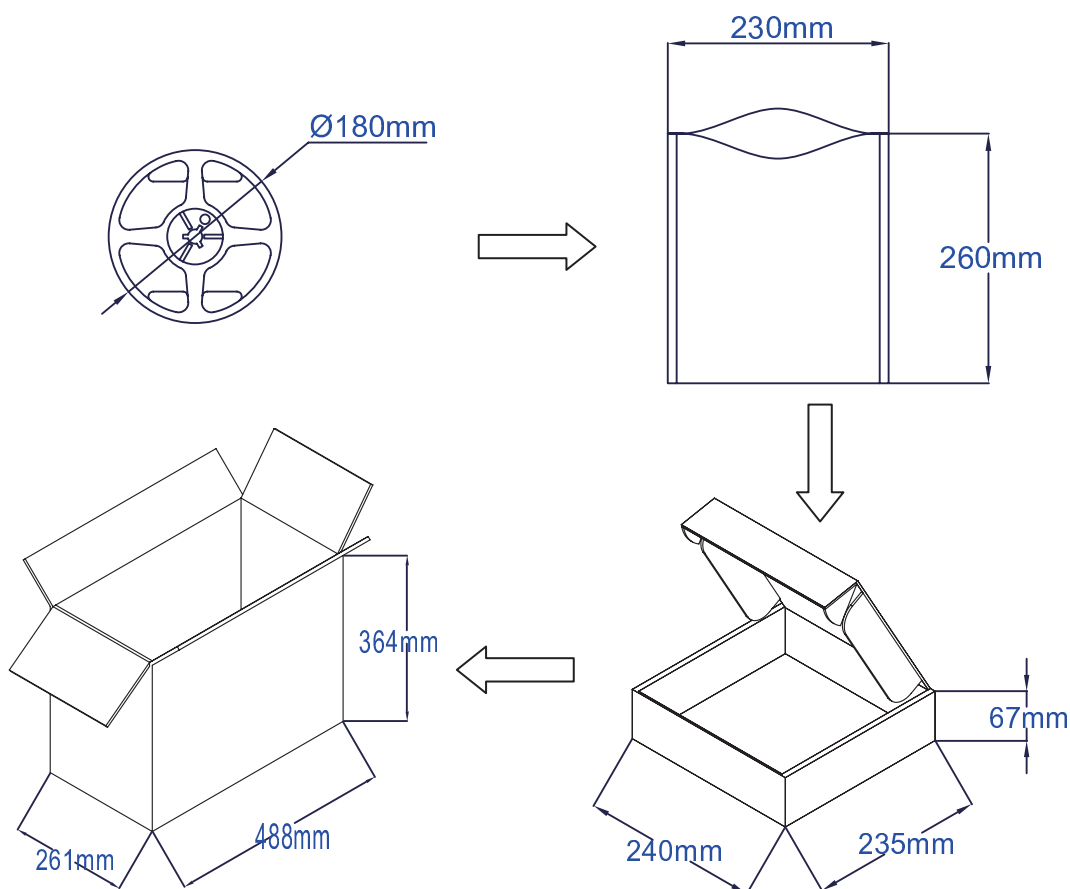
Notes:

1. All dimensions are in millimeters.
2. Tolerance is ± 0.20 mm

Product Packaging Information

PLCC lightbar FPC material Description

Order Code Package Type	6LBR1xxNJ0000xxx	6LBR1xxNI0000xxx	Dimension
Antistatic bag	1 Reel	1 Reel	260mm x 230mm
Inside box	5 Antistatic bags	4 Antistatic bags	240mm x 235mm x 67mm
Outside box	10 Inside boxes	10 Inside boxes	488mm x 364mm x 261mm



Revision History

Versions	Description	Release Date
1	Establish order code information	2013/03/14
2	Update the Title	2013/05/14

About Edison Opto

Edison Opto is a leading manufacturer of high power LED and a solution provider experienced in LDMS. LDMS is an integrated program derived from the four essential technologies in LED lighting applications- Thermal Management, Electrical Scheme, Mechanical Refinement, Optical Optimization, to provide customer with various LED components and modules. More Information about the company and our products can be found at www.edison-opto.com

Copyright©2013 Edison Opto. All rights reserved. No part of publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photo copy, recording or any other information storage and retrieval system, without prior permission in writing from the publisher. The information in this publication are subject to change without notice.