EDISON
Lighting Design Manufacturing Service

PLCC 5050 Hunter
Lightbar IP20 Datasheet

Product description :

- 12/24 V constant voltage strip (SELV)
- Ideal for application on aluminum extrusions but also for various decorative lighting applications such as cove lighting,facade accent lighting etc.

Features and benefits :

- Extremely narrow pitch distance enables short distance to diffuser and outstanding homogeneity
- Small color tolerance (SDCM3-5), Ra> 80
- Color temperature 2700, 3000, 4000 and 5700 K
- Self-adhesive 3M tape at the backside for simple mounting on different surfaces
- Life-time 20,000 hours
- 2year guarantee

Typical Applications :

- Stairway Accent Lighting
- Home or Club Lighting
- Architectural decorative Lighting
- Arch edge Lighting

EDISON
Lighting Design Manufacturing Service

Table of Contents

Lighting Design Manufacturing Service

General Information

Ordering Code Format

6	L B R 2	x x	x	E 0	x	x x x	x x
X1	X2	X3	X4	X5	X6	X7	X8

X1 Item		X2 Series		X3 Emitting Color		X4 Driver		X5 Length	
6	Module	LBR2	FPC	CW	Cool White	I	CV 12V	E0	5.0M
				NW	Neutral White	J	CV 24V		
				WW	Warm White				
				M1	RGB				

X6 Emitter		X7 Number of LEDs(M)		X8 Serial No.	
M	5050	060	60pcs	xx	-

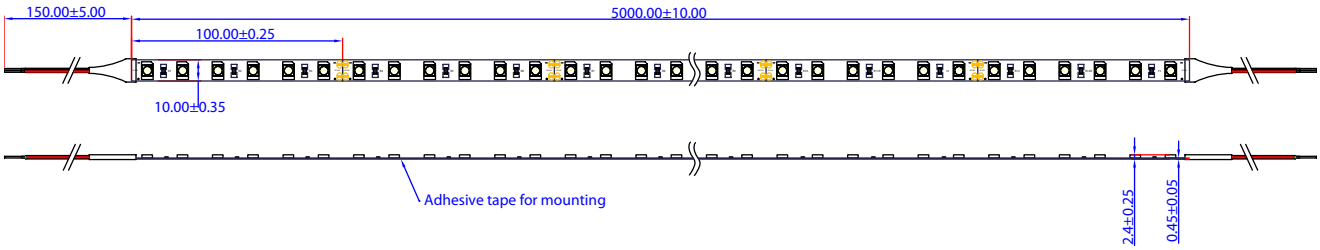
Technical data

Parameter	Value	Units
Beam characteristic	120	°C
Ambient temperature range	-25~ +45	°C
Tp rated	65	°C
Tc	75	°C
Type of protection	IP20	
Color Temperature	2700	K
	3000	K
	4000	K
	5700	K
Number of connection	5	M
Risk group(EN62778)	1	
Classification acc. to	IEC62031	
	IEC62778	
	IEC62717	
	IEC61000-4-2	

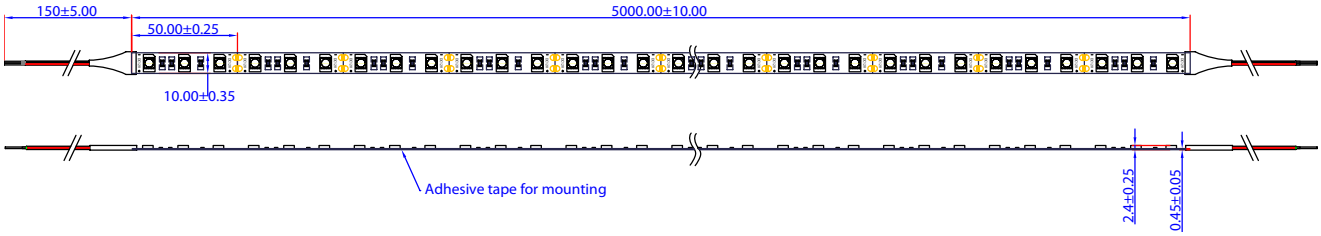
Lighting Design Manufacturing Service

Mechanical Dimensions

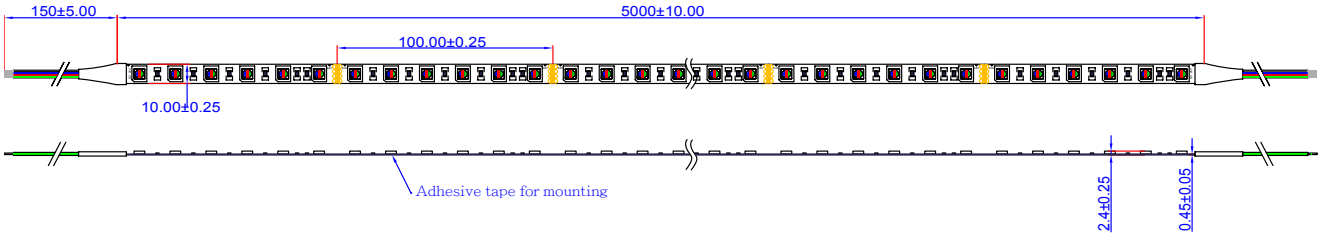
5050-60LED/M Series Dimensions (CV 24V IP20)



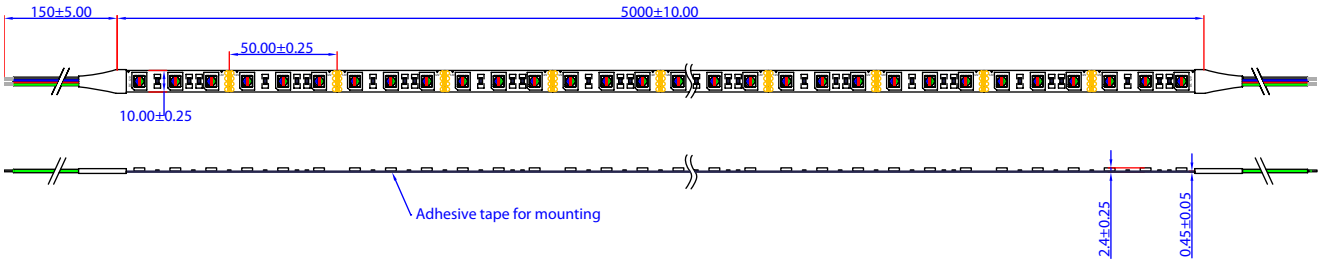
5050-60LED/M Series Dimensions (CV 12V IP20)



5050 RGB-60LED/M Series Dimensions (CV 24V IP20)



5050 RGB-60LED/M Series Dimensions (CV 12V IP20)



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

EDISON
Lighting Design Manufacturing Service

Electric-Optical Characteristics

5050/12V-60LEDS/M Series

Order code	CCT (K/)	Voltage (CV)	Luminous flux TP25°C	Luminous flux TP65°C	Efficacy TP25°C	Efficacy TP65°C	Power (W/M)	Ra
6LBR2CWIE0M06002	5700	12	1470 lm/M	1323 lm/M	103 lm/W	93 lm/W	14.4	>80
6LBR2NWIE0M06002	4000	12	1470 lm/M	1323 lm/M	103 lm/W	93 lm/W	14.4	>80
6LBR2WWIE0M06002	3000	12	1370 lm/M	1233 lm/M	95 lm/W	85 lm/W	14.4	>80
	2700	12	1270 lm/M	1143 lm/M	88 lm/W	79 lm/W	14.4	>80

5050/24V-60LEDS/M Series

Order code	CCT (K/)	Voltage (CV)	Luminous flux TP25°C	Luminous flux TP65°C	Efficacy TP25°C	Efficacy TP65°C	Power (W/M)	Ra
6LBR2CWJE0M06002	5700	24	1470 lm/M	1323 lm/M	103 lm/W	93 lm/W	14.4	>80
6LBR2NWJE0M06002	4000	24	1470 lm/M	1323 lm/M	103 lm/W	93 lm/W	14.4	>80
6LBR2WWJE0M06002	3000	24	1370 lm/M	1233 lm/M	95 lm/W	85 lm/W	14.4	>80
	2700	24	1270 lm/M	1143 lm/M	88 lm/W	79 lm/W	14.4	>80

5050/RGB-60LEDS/M Series

Order code	CCT (K/)	Voltage (CV)	Luminous flux TP25°C	Luminous flux TP65°C	Power (W/M)	Ra
6LBR2M1IE0M06001	R: 620-635	12	R: 125 lm/M	R: 113 lm/M	14.4	-
	G: 530-535		G: 320 lm/M	G: 288 lm/M		
	B: 460-475		B: 65 lm/M	B: 59 lm/M		
6LBR2M1JE0M06001	R: 620-635	24	R: 125 lm/M	R: 113 lm/M	14.4	-
	G: 530-535		G: 320 lm/M	G: 288 lm/M		
	B: 460-475		B: 65 lm/M	B: 59 lm/M		

Notes:
1.The Maximum and minimum lumen flux are based on ±10% of the typical rate.
2.The Maximum and minimum Power are based on ±10% of the typical rate.

Standards

Energy classification

Type	CCT	Energy Classification
5050-12v-60LED/M Series	2700/3000K	A
	4000/5700K	A
5050-24v-60LED/M Series	2700/3000K	A
	4000/5700K	A
5050RGB-12v-60LED/M Series	RGB	-
	RGB	-
5050RGB-24v-60LED/M Series	RGB	-
	RGB	-

Thermal details

Storage and humidity

Storage temperature:-35 ... +70 °C
Operation only in non condensing environment.
Humidity during processing of the module should be between 0 to 70 %

Life time

Life-time, lumen maintenance and failure rate

1. The light output of an LED Module decreases over the life-time, this is characterized with the L value.
2. L70 means that the LED module will give 70 % of its initial luminous flux. This value is always related to the number of operation hours and therefore defines the life-time of an LED module.
3. As the L value is a statistical value and the lumen maintenance may vary over the delivered LED modules value defines the amount of modules which are below the specific L value, e.g. L70B10 means 10 % of the LED modules are below 70 % of the initial luminous flux, respectively 90 % will be above 70 % of the initial value. In addition the percentage of failed modules (fatal failure) is characterized by the C value.
4. The F value is the combination of the B and C value. That means for F degradation and complete failures are considered, e.g. L70F10 means 10 % of the LED Modules may fail or below 70% of the initial luminous flux

Lumen maintenance for 5050-12V-60LED/M Series

Supply Voltage	Tp temperature	L90/F10	L90/F50	L80/F10	L80/F50	L70/F10	L70/F50
12V	40	>17,000 h	>18,000 h	>19,000 h	>20,000 h	>20,000 h	>20,000 h
12V	45	>16,000 h	>17,000 h	>18,000 h	>20,000 h	>20,000 h	>20,000 h
12V	55	>14,000 h	>15,000 h	>16,000 h	>30,000 h	>30,000 h	>30,000 h
12V	65	>12,000 h	>14,000 h	>15,000 h	>20,000 h	>20,000 h	>20,000 h
12V	75	>10,000 h	>12,000 h	>13,000 h	>20,000 h	>20,000 h	>20,000 h

Lumen maintenance for 5050-24V-60LED/M Series

Supply Voltage	Tp temperature	L90/F10	L90/F50	L80/F10	L80/F50	L70/F10	L70/F50
24V	40	>17,000 h	>18,000 h	>19,000 h	>20,000 h	>20,000 h	>20,000 h
24V	45	>16,000 h	>17,000 h	>18,000 h	>20,000 h	>20,000 h	>20,000 h
24V	55	>14,000 h	>15,000 h	>16,000 h	>30,000 h	>30,000 h	>30,000 h
24V	65	>12,000 h	>14,000 h	>15,000 h	>20,000 h	>20,000 h	>20,000 h
24V	75	>10,000 h	>12,000 h	>13,000 h	>20,000 h	>20,000 h	>20,000 h

Lumen maintenance for 5050RGB-12V-60LED/M Series

Supply Voltage	Tp temperature	L90/F10	L90/F50	L80/F10	L80/F50	L70/F10	L70/F50
12V	40	>17,000 h	>18,000 h	>19,000 h	>20,000 h	>20,000 h	>20,000 h
12V	45	>16,000 h	>17,000 h	>18,000 h	>20,000 h	>20,000 h	>20,000 h
12V	55	>14,000 h	>15,000 h	>16,000 h	>30,000 h	>30,000 h	>30,000 h
12V	65	>12,000 h	>14,000 h	>15,000 h	>20,000 h	>20,000 h	>20,000 h
12V	75	>10,000 h	>12,000 h	>13,000 h	>20,000 h	>20,000 h	>20,000 h

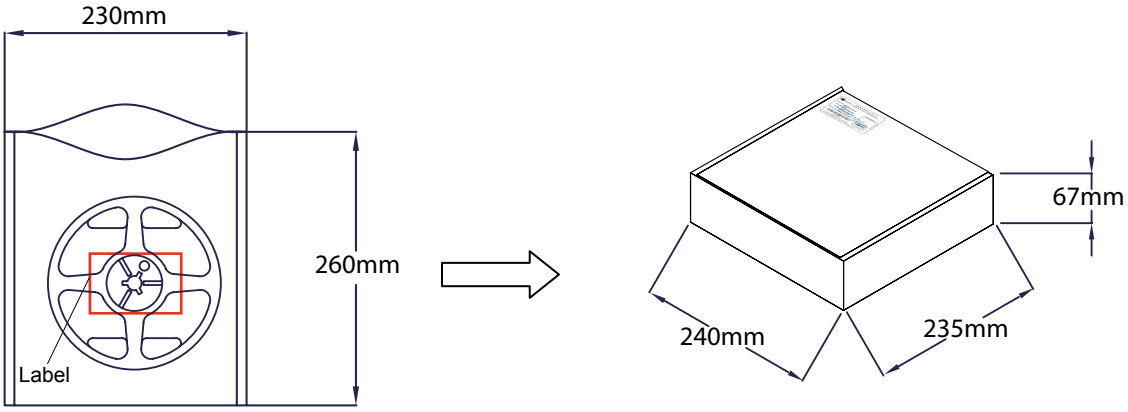
Lumen maintenance for 5050RGB-24V-60LED/M Series

Supply Voltage	Tp temperature	L90/F10	L90/F50	L80/F10	L80/F50	L70/F10	L70/F50
24V	40	>17,000 h	>18,000 h	>19,000 h	>20,000 h	>20,000 h	>20,000 h
24V	45	>16,000 h	>17,000 h	>18,000 h	>20,000 h	>20,000 h	>20,000 h
24V	55	>14,000 h	>15,000 h	>16,000 h	>30,000 h	>30,000 h	>30,000 h
24V	65	>12,000 h	>14,000 h	>15,000 h	>20,000 h	>20,000 h	>20,000 h
24V	75	>10,000 h	>12,000 h	>13,000 h	>20,000 h	>20,000 h	>20,000 h

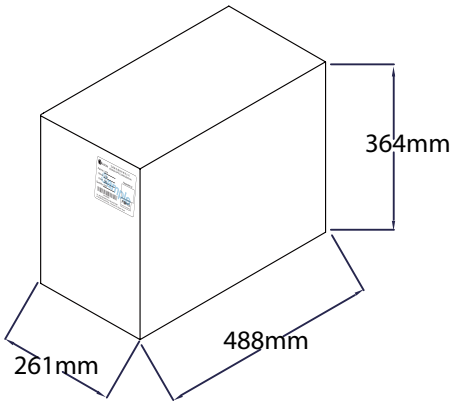
EDISON
Lighting Design Manufacturing Service

Product Packaging Information

Type	Anti-static bag size(mm)	Anti-static bags/ inner box(pcs)	Inner box/carton(pcs)	Outside Carton size(mm)	GW±5% (kg)
5050-12V-60LED/M Series	260x230x10	4	10	488x261x364	6.7
5050-24V-60LED/M Series	260x230x10	4	10	488x261x364	6.7
5050RGB-12V-60LED/M Series	260x230x10	4	10	488x261x364	7.1
5050RGB-24V-60LED/M Series	260x230x10	4	10	488x261x364	7.1



EX:



Label information
Part NO. : Order code
Color : Color(Emitter BIN color)
Quantity : The number of packing
Lot NO. : Date code

Precaution for Use

1. DO NOT use the products with materials has Sulfur.
2. DO NOT assemble in humid environment or the conditions of containing oxidizing gas such as C1, H2S, NH3, SO2, NOX, etc.
3. DO NOT add or change wires while the circuit of Module is active.Long time exposure to sunlight or UV should be avoided.
4. DO NOT press the product; even a slight pressure may damage the product. The environments such as high temperatures, high humidity or direct expose to sunlight should be avoided since the product is sensitive to these conditions.
5. Installation of LED modules (with power supplies) needs to be made with regard to all applicable and safety standards. Only qualified personnel should be allowed to perform installations.
6. Assembly must not damage or destroy conducting paths on the circuit board.
7. Please ensure that the power supply is of adequate power to operate the total load.
8. The maximum run length from any power feed should be limited to 5000 mm.

Environmental Compliance

PLCC lightbar FPC series are compliant to the Restriction of Hazardous Substances Directive or RoHS. The restricted materials including lead, mercury cadmium hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ether (PBDE) are not used in PLCC lightbar FPC series to provide an environmentally friendly product to the customers.

Application Notes

PLCC Lightbar series are available in red, yellow, green, blue, white, neutral white and warm white for application such as under-cabinet lighting, cove lighting and wall washing. Moreover, additional fine-tuned high color rendering index (CRI) version of white, neutral white and warm white all make PLCC Lightbar the ideal lighting choice for vividly building or decoration products, presenting the products outline.

EDISON
Lighting Design Manufacturing Service

Revision History

Versions	Description	Release Date
1	Establish order code information	2017/10/20
2	Revise Absolute Maximum Ratings Value Revise Cutting Assembly Instructions Picture Revise Precaution for Use Information	2018/01/09
3	Add 5050 RGB Lightbar specifications	2018/10/16
4	Revise 5050 RGB Lightbar number	2019/01/17
5	Upgrade version	2019/08/29

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

www.edison-opto.com

For general assistance please contact:
service@edison-opto.com.tw

For technical assistance please contact:
LED.Detective@edison-opto.com.tw