Hebei I.T. (Shanghai) Co., Ltd.   SPECIFICATION
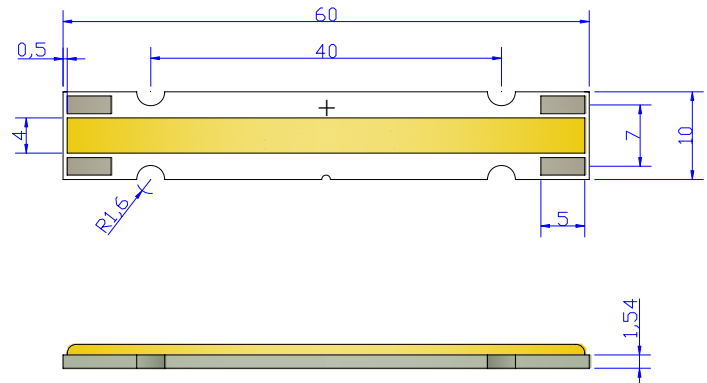
Part No.   LM-W6-60*10-3W

Features：

- High radiometric power per LED
- Very long operating life
  (up to 100K hours)
- Low voltage DC operated
- More Energy Efficient than Incandescent
  and most Halogen lamps
- Good color uniformity
- NO UV
- Superior ESD protection
- Easy installation with Screws
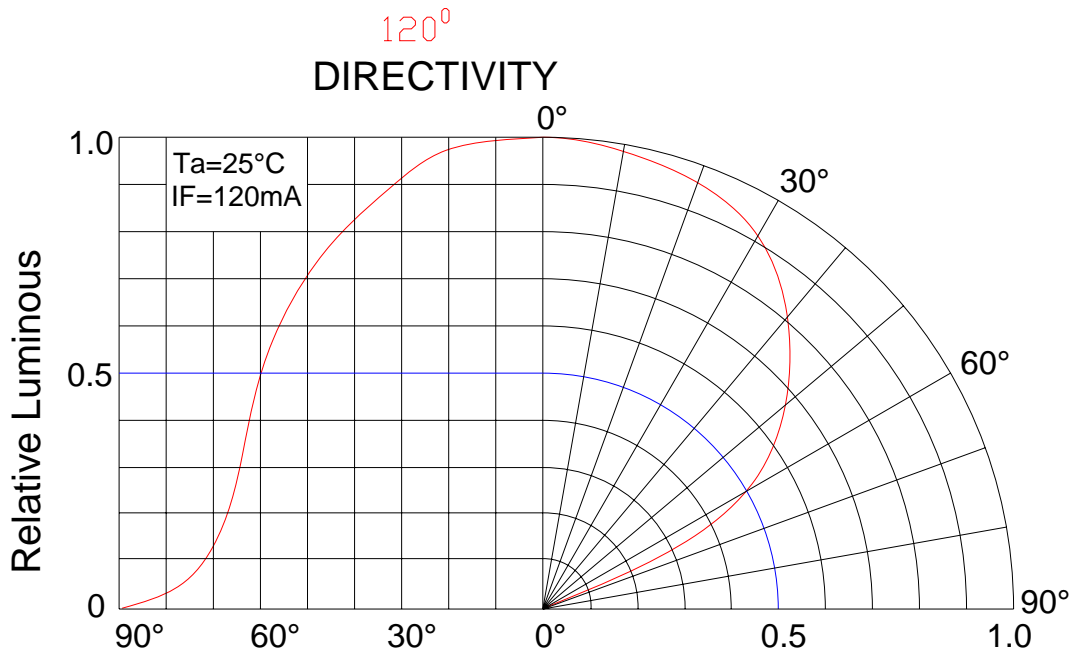- High Heat dissipstion Efficiency

Typical Applications：

- Reading lights(car,bus,aircraft)
- Portable(flashlight,bicycle)
- Automotive Exterior(Stop-Tail-Turn,
  CHMSL,Mirror Side Repeat)
- Decorative/Entertainment
- Dental curing lights
- Uplighters/Downlighters
- Bollards/Security/Garden
- Cove/Undershelf/Task
- Indoor/Outdoor Commercial and Residential Architectural
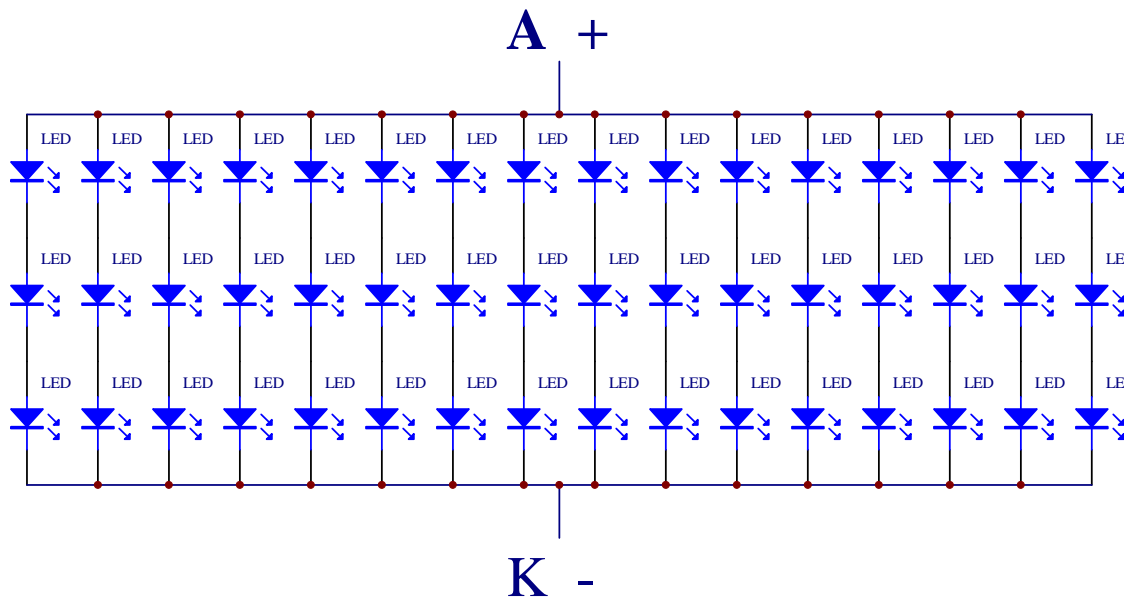- Automotive Ext(stop-Tail-Turn)
- Lcd backlights

NOTE:
- **All dimensions are millimeter.**
- **Tolerance is ±0.1mm unless otherwise noted**
- **It is strongly recommended that the temperature of lead be not higher than 55°C**
- The appearance and specifications of the product may be modified for improvement without notice.

DIRECTIVITY

120⁰

Ta=25°C
IF=120mA

Relative Luminous

0°   30°   60°   90°

90°   60°   30°   0°   0.5   1.0

Circuit diagram:

A +

K -

Part No. **LM-W6-60*10-3W**

Absolute maximum ratings（Ta = 25℃）

Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max.	
DC Forward Current	IF	----	----	400	mA
Peak Pulse Current	Ipeak	Duty=0.1，1kHz	----	800	mA
Power Dissipation	Pd	----	----	3.5	W
LED Junction Temperature	Tj	----	----	120	℃
Operating Temperature	Topr	----	-25	+80	℃
Storage Temperature	Tstr	----	-40	+100	℃
ESD Sensitivity	---	HBM	8000	----	V
Soldering Temperature	---	-----	220℃ for 5 Seconds max		

Electrical and optical characteristics （Ta = 25℃）

Parameter	Symbol	Test Condition	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	VF	IF = 320mA	----	9.5	9.9	V
Luminous Flux	Φv		180	260	-----	lm
Viewing Angle	$2\theta 1/2$		----	120	----	Deg.
Color Temperature	CCT		5000	----	6500	K

Luminous Flux Bins（Ta = 25℃）   **Unit:lm**

Bin	S	T	U	V
Min	180	200	240	280
Max	200	240	280	320

Chromaticity Coordinates Ranks(IF=320mA   Ta=25℃)

Bin	x1	y1	x2	y2	x3	y3	x4	y4
PT1	0.3384	0.3650	0.3381	0.3550	0.3461	0.3617	0.3469	0.3717
PT2	0.3381	0.3550	0.3378	0.3451	0.3453	0.3518	0.3461	0.3617
PT3	0.3378	0.3451	0.3374	0.3352	0.3444	0.3418	0.3453	0.3518
PT4	0.3374	0.3352	0.3371	0.3252	0.3436	0.3318	0.3444	0.3418
PV1	0.3300	0.3584	0.3302	0.3484	0.3381	0.3550	0.3384	0.3650
PV2	0.3302	0.3484	0.3303	0.3384	0.3378	0.3451	0.3381	0.3550
PV3	0.3303	0.3384	0.3304	0.3285	0.3374	0.3352	0.3378	0.3451
PV4	0.3304	0.3285	0.3306	0.3185	0.3371	0.3252	0.3374	0.3352

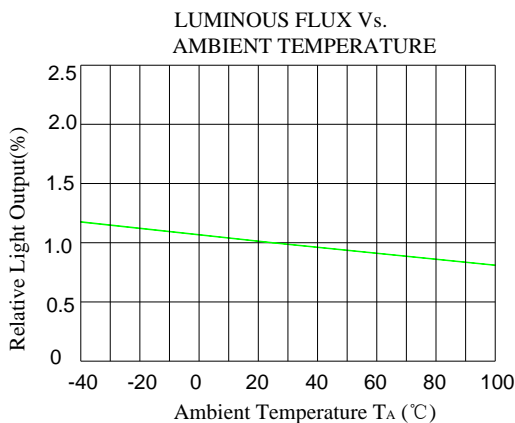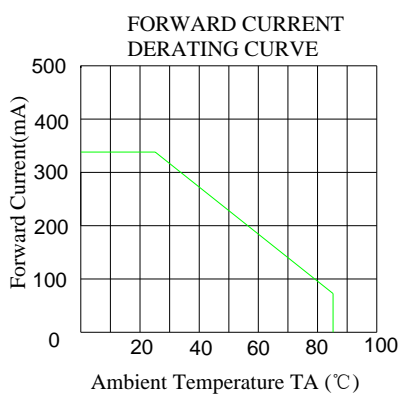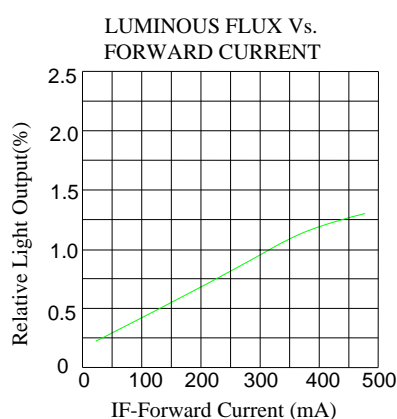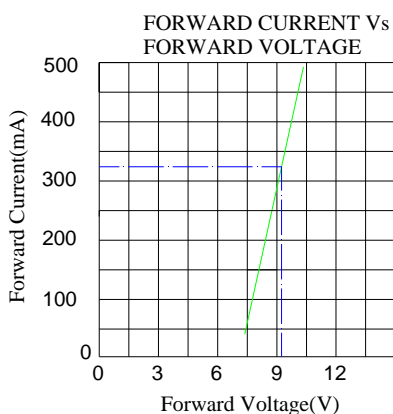| Bin	x1	y1	x2	y2	x3	y3	x4	y4
PW1	0.3236	0.3534	0.3242	0.3434	0.3302	0.3484	0.3300	0.3584
PW2	0.3242	0.3434	0.3247	0.3335	0.3303	0.3384	0.3302	0.3484
PW3	0.3247	0.3335	0.3253	0.3235	0.3304	0.3285	0.3303	0.3384
PW4	0.3253	0.3235	0.3258	0.3136	0.3306	0.3185	0.3304	0.3285
PX1	0.3173	0.3484	0.3182	0.3385	0.3242	0.3434	0.3236	0.3534
PX2	0.3182	0.3385	0.3191	0.3286	0.3247	0.3335	0.3242	0.3434
PX3	0.3191	0.3286	0.3201	0.3186	0.3253	0.3235	0.3247	0.3335
PX4	0.3201	0.3186	0.3210	0.3086	0.3258	0.3136	0.3253	0.3235
PY1	0.3109	0.3434	0.3122	0.3335	0.3182	0.3385	0.3173	0.3484
PY2	0.3122	0.3335	0.3135	0.3236	0.3191	0.3286	0.3182	0.3385
PY3	0.3135	0.3236	0.3149	0.3136	0.3201	0.3186	0.3191	0.3286
PY4	0.3149	0.3136	0.3162	0.3037	0.3210	0.3086	0.3201	0.3186

Note

1. Flux is measured with an accuracy of ±15%

2. Chromaticity Coordinates (x,y) is measured with an accuracy of ±0.01

3. Forward Voltage is measured with an accuracy of ± 0.2V

4. It is strongly recommended that the temperature of lead be not higher than 55°C

Color Spectrum, TJ=25°C

White

White
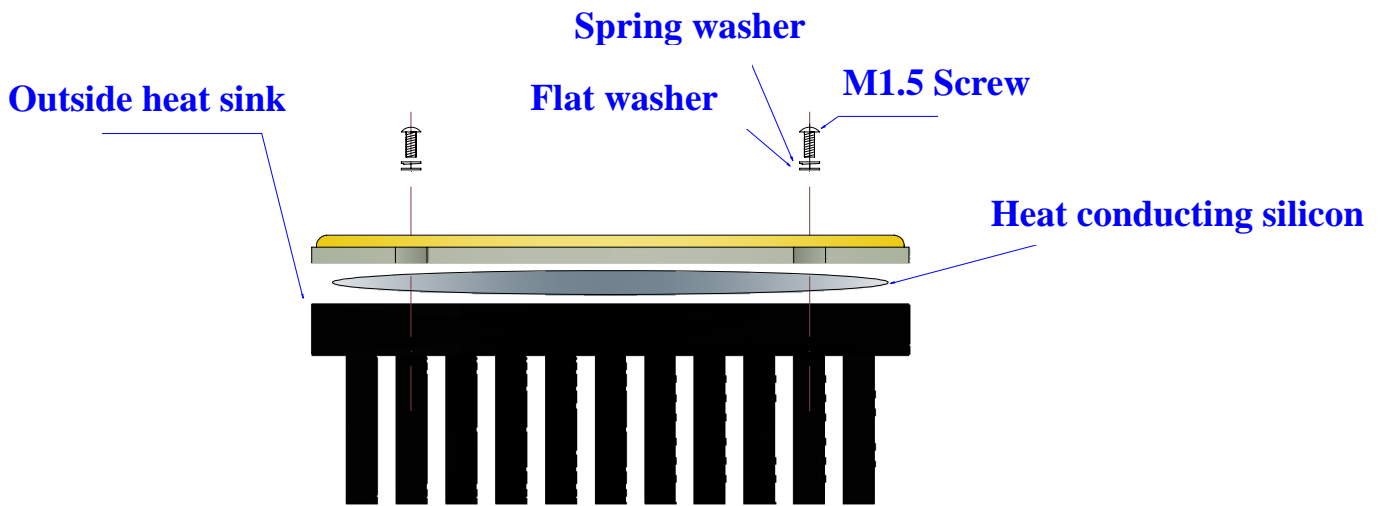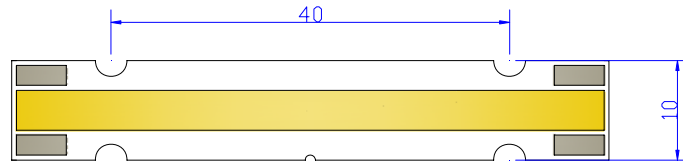
Standard Eye Response Cruve

Relative Spectral Power Distribution

1.0
0.8
0.6
0.4
0.2
0.0

350 400 450 500 550 600 650 700 750 800 850

Wavelength λ (nm)

Typical electrical/optical characteristic curves：

FORWARD CURRENT Vs
FORWARD VOLTAGE

Forward Current(mA)

500
400
300
200
100
0

0   3   6   9   12

Forward Voltage(V)

LUMINOUS FLUX Vs.
FORWARD CURRENT

Relative Light Output(%)

2.5
2.0
1.5
1.0
0.5
0

0   100   200   300   400   500

IF-Forward Current (mA)

FORWARD CURRENT
DERATING CURVE

Forward Current(mA)

500
400
300
200
100
0

20   40   60   80   100

Ambient Temperature TA (℃)

LUMINOUS FLUX Vs.
AMBIENT TEMPERATURE

Relative Light Output(%)

2.5
2.0
1.5
1.0
0.5
0

-40   -20   0   20   40   60   80   100

Ambient Temperature T$_A$ (℃)

Suggest:

If you can not slove the heat problem, the product will distroy easily.

Suggest that the surface of the heat sink is $65cm^2/1W$