

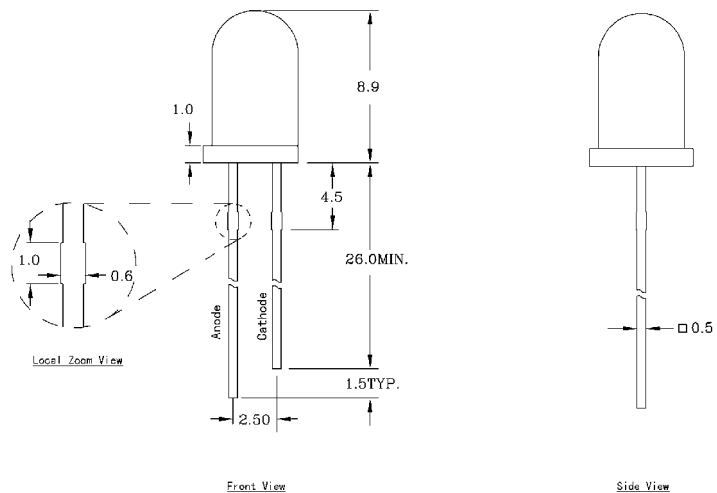
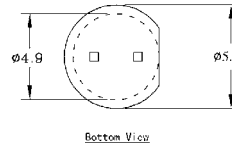
MEGA BRIGHT LED

BTL-51WHC-XX-X

Product Features

- Ultra Bright White Color
- High Light Output
- 5mm Diameter Circular Package
- Water Clear Lens
- Highly Reliable
- IC Compatible
- Leads without Stand Off

Package Dimension



Applications

- Automotive
- Front Panel Indicator
- Special Lighting
- General Purpose LEDs

WARNING

This range of LEDs is produced with die having a high radiant flux. Care must be taken when viewing the product at close range as the light may be intense enough to cause damage to the human eye.

Note: Industry standard procedures regarding static must be observed when handling this product.

Tolerance: $\pm \frac{\text{inch}}{\text{mm}}$ Unit: $\pm \frac{0.01}{0.25}$

Optical and Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Minimum	Typical	Maximum	Units	Conditions
Luminous Intensity	I_v	—	8000	—	mcd	$I_F = 20\text{mA}$ (Note 1)
Viewing Angle	$2\theta_{1/2}$	—	15	—	deg	$I_F = 20\text{mA}$
Color Coordinates	X	—	0.27	—	n/a	$I_F = 20\text{mA}$ (Note 2)
	Y	—	0.28	—	n/a	
DC Forward Voltage	V_F	—	3.5	4.0	V	$I_F = 20\text{mA}$
DC Reverse Current	I_R	0	—	10	μA	$V_R=5\text{V}$

Notes:

1. Light intensity measures the light sensing response standard using chromatic meter. Refer to the CIE eye-response curve set by International Lighting committee. Tolerance of minimum and maximum intensity = $\pm 15\%$
2. Color coordinates range can be selected from the bin selection table. The parameters used fulfilled the 1932 2 standard
3. These products are sensitive to static electricity and care must be fully taken when handling products

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

Symbol	Parameter	Max.	Unit
P_D	Power Rating	100	mW
V_R	Reverse Voltage ($I_R=10\mu\text{A}$)	5	V
I_F	Continuous Forward Current	30	mA
I_{FP}	Peak Forward Current (0.1 duty cycle @ 1kHz)	100	mA
T_{opr}	Operating Temperature Range	$-35 \sim +80$	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	$-40 \sim +100$	$^\circ\text{C}$
Lead Soldering Temperature [1.6mm (0.063inch) from body]		260 $^\circ\text{C}$ - max 5 seconds	

Color and Brightness Selection

BTL-51WHC-XX-X

Color Bin Selection

Bin	White	
	X	Y
BW (Bluish White)	0.20	0.20
	0.27	0.28
	0.31	0.27
	0.31	0.20
PW (Pure White)	0.24	0.28
	0.32	0.36
	0.36	0.36
	0.36	0.28
YW (Yellowish White)	0.29	0.36
	0.38	0.45
	0.42	0.45
	0.42	0.36
XX	All Range	

Brightness Bin Selection

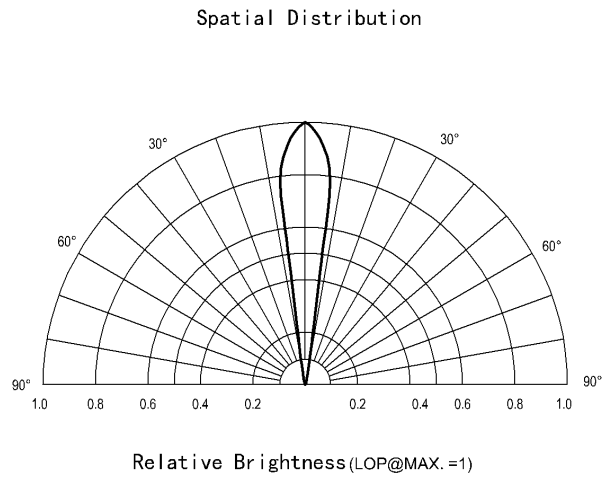
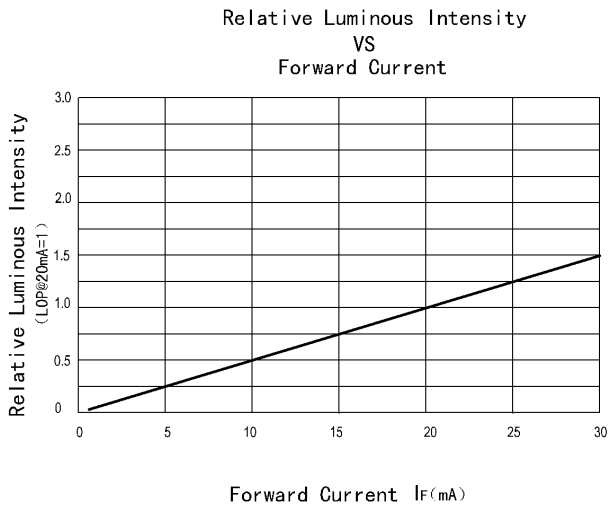
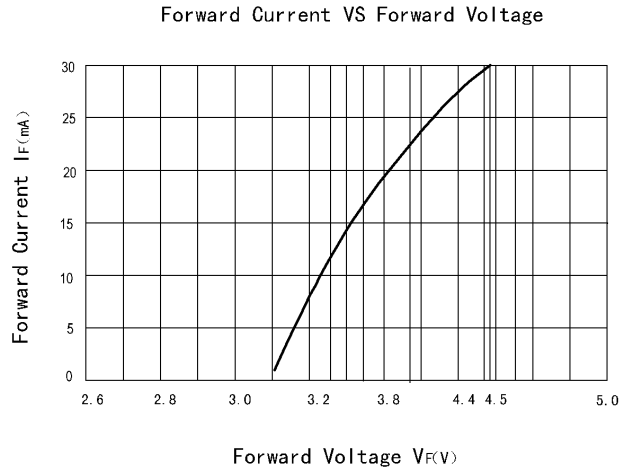
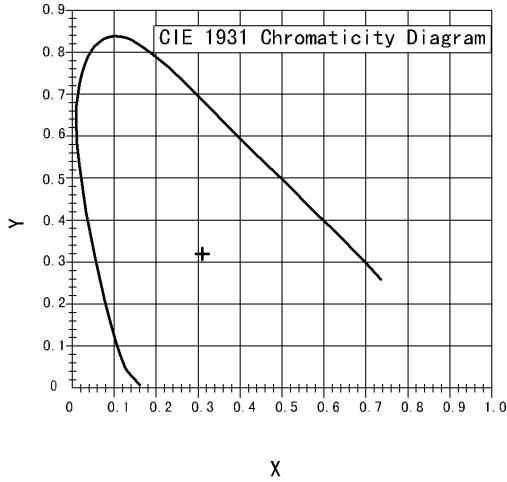
Bin	Range(mcd)
T	4245~5515
U	5515~7170
V	7170~9320
W	9320~12000
X	12000~15600



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Typical Electro-Optical Characteristics Curves at $T_a=25^\circ\text{C}$



BT-Rev. 1.0a
Specifications are subject to change without notice.
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