

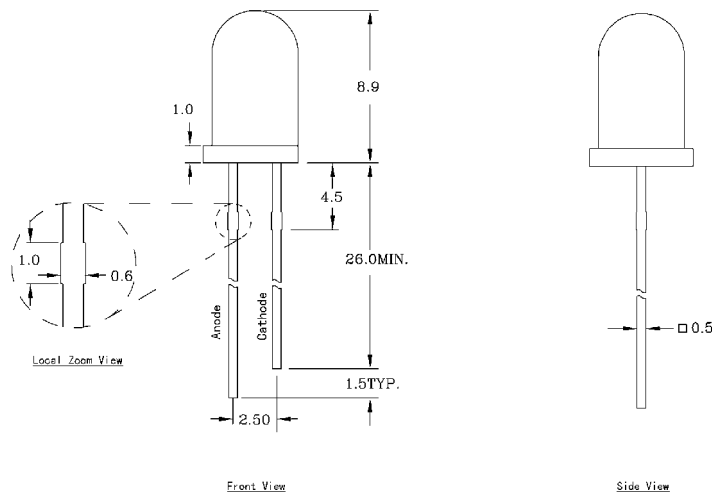
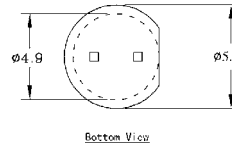
# MEGA BRIGHT LED

## BTL-50WHC-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	$I_v$	—	8500	—	mcd	$I_F = 20\text{mA}$ (Note 1)
Viewing Angle	$2\theta_{1/2}$	—	8	—	deg	$I_F = 20\text{mA}$
Color Coordinates	X	—	0.30	—	n/a	$I_F = 20\text{mA}$ (Note 2)
	Y	—	0.30	—	n/a	
DC Forward Voltage	$V_F$	—	3.5	4.0	V	$I_F = 20\text{mA}$
DC Reverse Current	$I_R$	0	—	10	$\mu\text{A}$	$V_R=5\text{V}$

#### 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-50WHC-XX-X

#### Color Bin Selection

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

#### Brightness Bin Selection

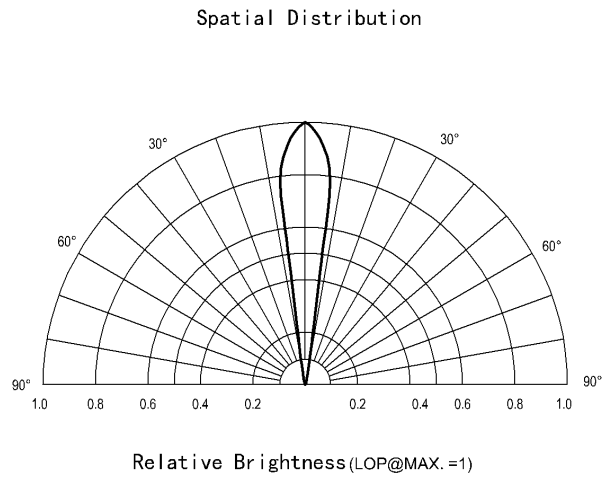
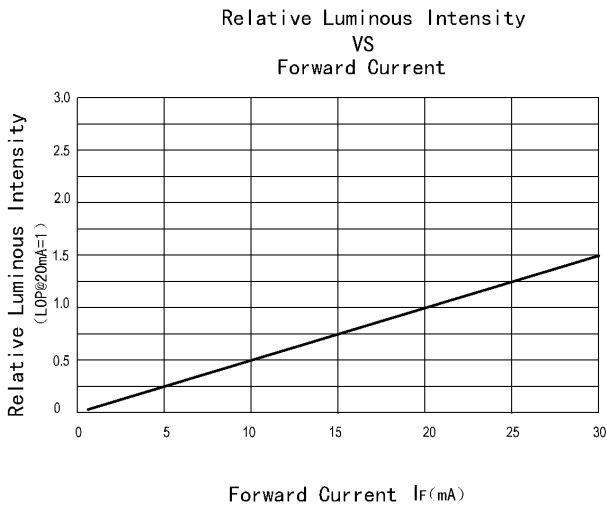
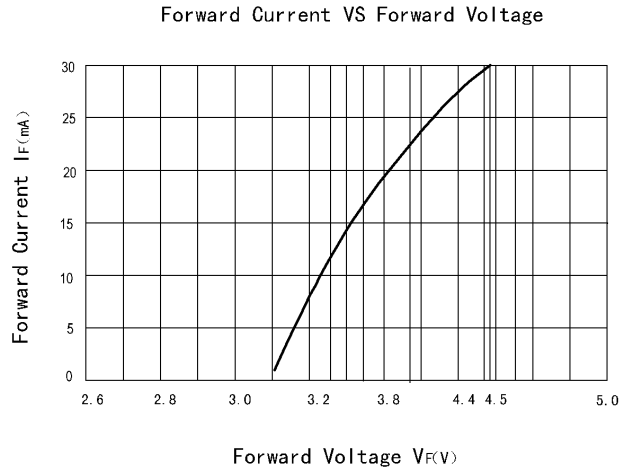
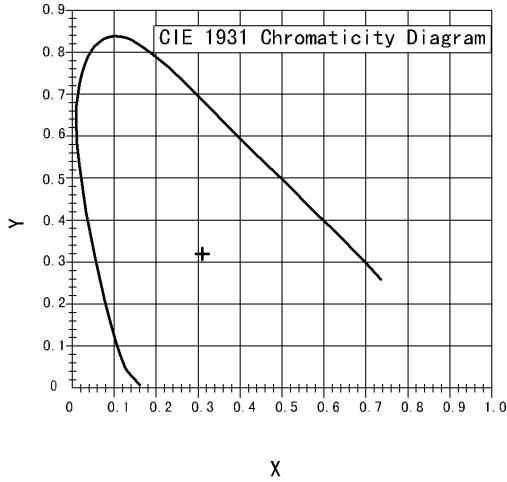
Bin	Range(mcd)
<b>U</b>	5515~7170
<b>V</b>	7170~9320
<b>W</b>	9320~12000



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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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