

LC503QBL1-15H-A

Features

5mm Package
 High Luminous Intensity
 High Optical Power
 All Plastic Mold Type
 Water Clear Lens

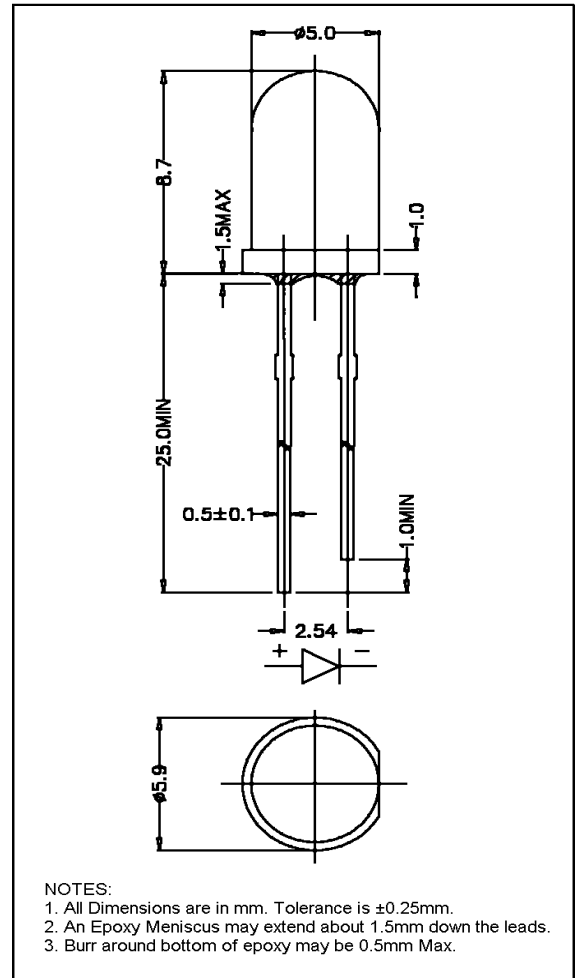


ATTENTION

OBSERVE PRECAUTIONS
 ELECTROSTATIC
 SENSITIVE DEVICES

Applications

Decorative Lighting
 General Purpose Lighting
 Indoor Message Centers
 Instrumentation
 Medical Equipment



Maximum Ratings ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Max.	Unit
Forward Current	I_F	25	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	105.00	mW
Operating Temperature	T_{opr}	-40 ~ +95	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +100	$^\circ\text{C}$
Soldering Temperature	T_{sol}	260	$^\circ\text{C}$
Soldering Time	-	for 3 sec. max	-

Opto-Electrical Characteristics ($T_a=25^\circ\text{C}$)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	-	3.60	4.20	V
Reverse Current	I_R	$V_R=5\text{V}$	-	-	100	μA
Luminous Intensity	I_v	$I_F=20\text{mA}$	3000	7000	-	mcd
Viewing Angle	$2\theta^{1/2}$	-	-	15°	-	deg.
Peak Wavelength	λ_p	$I_F=20\text{mA}$	-	465	-	nm
Dominant Wavelength	λ_d	$I_F=20\text{mA}$	-	470	-	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F=20\text{mA}$	-	28	-	nm

Specifications are subject to change without notice.

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LC503QBL1-15H-A Graphs

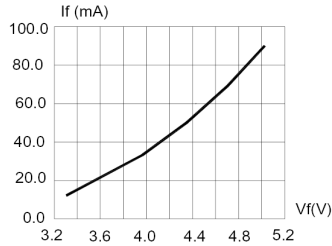


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

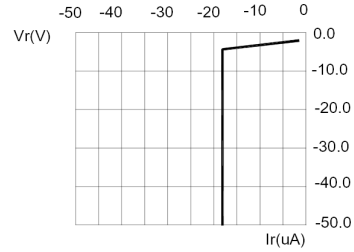


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

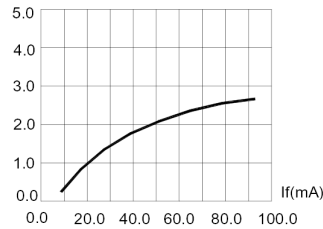


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

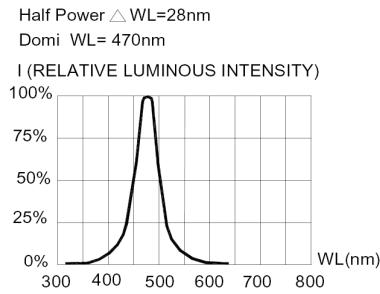


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

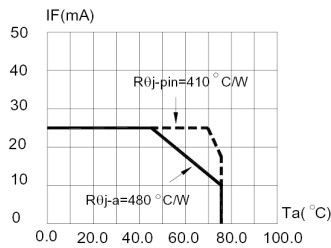


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE ($T_{jmax}=95^{\circ}C$)

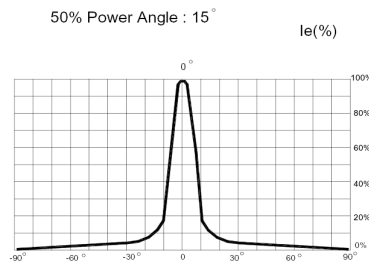


FIG.6 FAR FIELD PATTERN

1. Cathode PAD Area (0.18 X 0.18inch²)
2. Height above nominal seating plane in inches(0.3inch)

NOTES:

- Specification is subject to change without notice.
- All Ranks will be included per delivery, rank ratio will be determined by Cotco/Marktech.
- Tolerance of measurement of luminous intensity is $\pm 15\%$.
- Tolerance of measurement of dominant wavelength is $\pm 1nm$.
- Tolerance of measurement of Vf is $\pm 0.05V$.
- Packaging methods are available for selection, please refer to Packaging Standard.
- Please refer to LED Lamp Reliability Test Standard for reliability test conditions.

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