

### LC503PWH1-15H

#### Features

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

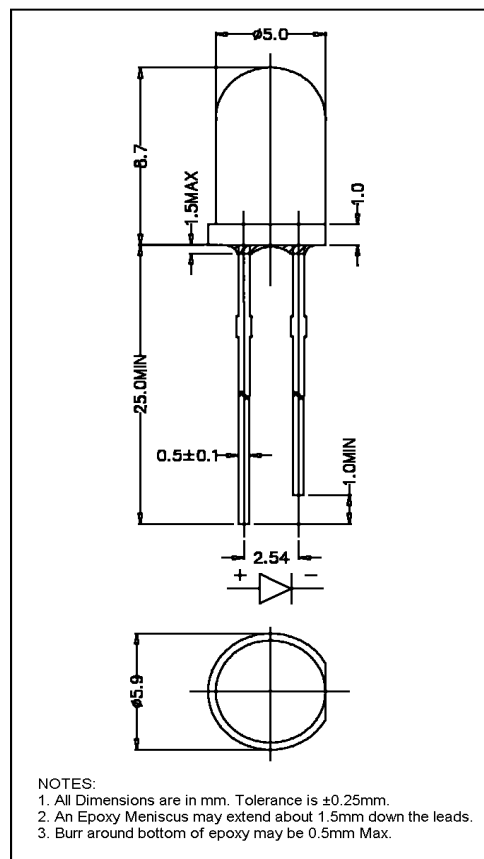
#### Applications

Decorative Lighting  
General Purpose Lighting  
Indoor Message Centers  
Instrumentation  
Medical Equipment



### ATTENTION

OBSERVE PRECAUTIONS  
ELECTROSTATIC  
SENSITIVE DEVICES



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

Characteristic	Symbol	Max.	Unit
Forward Current	$I_F$	25	mA
Reverse Voltage	$V_R$	5.00	V
Power Dissipation	$P_D$	120.00	mW
Operating Temperature	$T_{opr}$	$-20 \sim +75$	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	$-30 \sim +80$	$^\circ\text{C}$
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	$V_F$	$I_F=20\text{mA}$	3.20	3.60	4.20	V
Reverse Current	$I_R$	$V_R=5\text{V}$	—	—	100	$\mu\text{A}$
Luminous Intensity	$I_v$	$I_F=20\text{mA}$	3000.00	5000.00	—	mcd
Viewing Angle	$2\theta^{1/2}$	—	—	$15^\circ$	—	deg.
Peak Wavelength	$\lambda_p$	$I_F=20\text{mA}$	—	465	—	nm
Dominant Wavelength	$\lambda_d$	$I_F=20\text{mA}$	—	$x=.31$ , $y=.32$	—	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F=20\text{mA}$	—	28	—	nm

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### LC503PWH1-15H Graphs

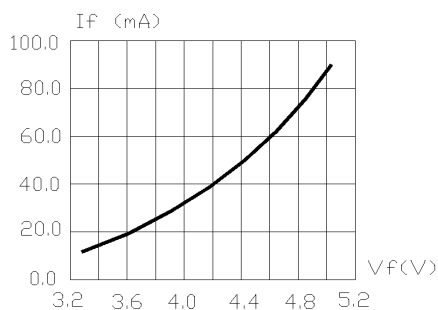


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

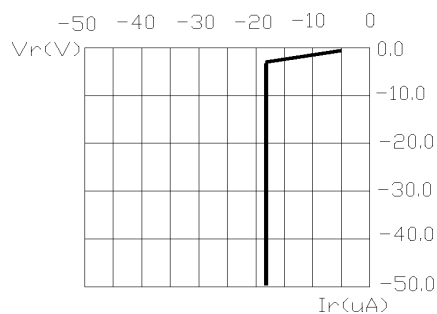


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

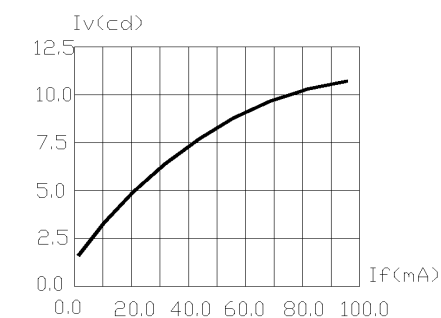


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

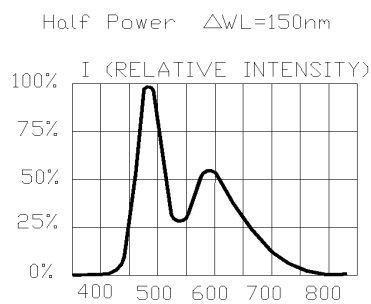


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

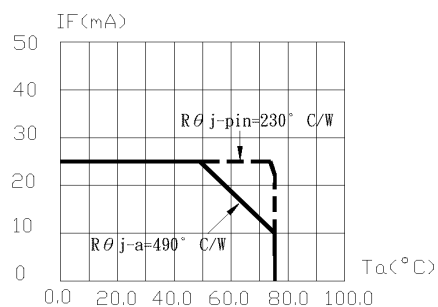


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE . DERATING BASED ON  $T_{jmax}=95^{\circ}C$

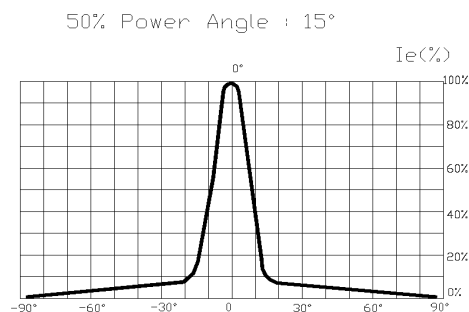
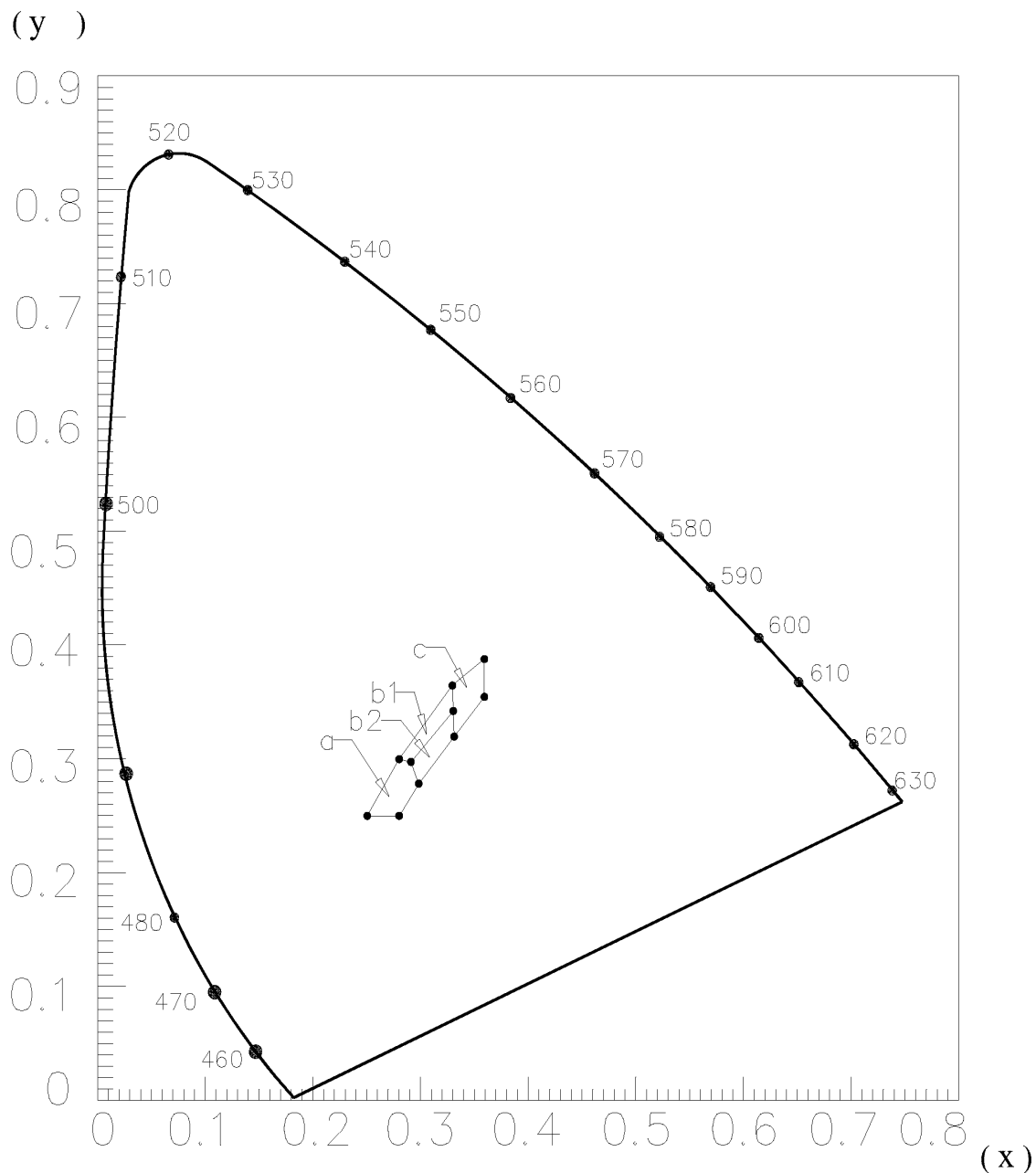


FIG.6 SPATIAL DISTRIBUTION.

- 1.Cathode PAD Area (0.18 ×0.18inch<sup>2</sup>)
2. Height above nominal seating plane in inches(0.3inch)

### LC503PWH1-15H Graphs

CIE Chromaticity Diagram



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