

### LC503TYL1-15Q

#### Features

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

#### Applications

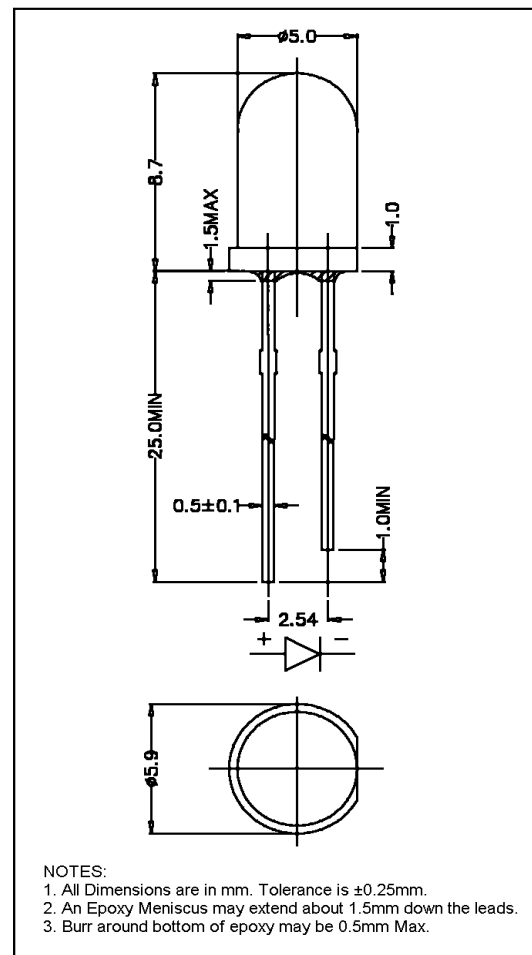
Decorative Lighting  
General Purpose Lighting  
Indoor Message Centers  
Instrumentation  
Medical Equipment

#### Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Unit
Forward Current	I <sub>F</sub>	50	mA
Reverse Voltage	V <sub>R</sub>	5.00	V
Power Dissipation	P <sub>D</sub>	150.00	mW
Operating Temperature	T <sub>opr</sub>	-40 ~ +95	°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100	°C
Soldering Temperature	T <sub>sol</sub>	260	°C
Soldering Time	—	for 5 sec. max	—

#### Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	1.70	2.10	2.60	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	—	—	100	μA
Luminous Intensity	I <sub>v</sub>	I <sub>F</sub> =20mA	4180.00	6000.00	—	mcd
Viewing Angle	2θ <sup>1/2</sup>	—	—	15°	—	deg.
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> =20mA	—	594	—	nm
Dominant Wavelength	λ <sub>d</sub>	I <sub>F</sub> =20mA	—	591	—	nm
Spectral Line Half Width	Δλ	I <sub>F</sub> =20mA	—	20	—	nm



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### LC503TYL1-15Q Graphs

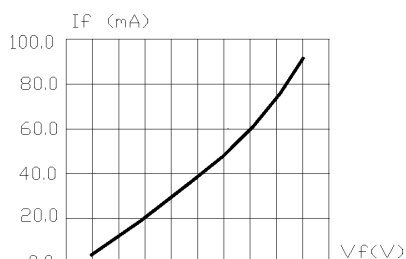


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

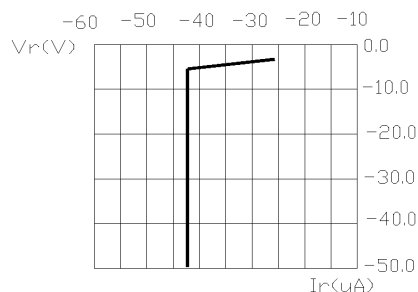


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

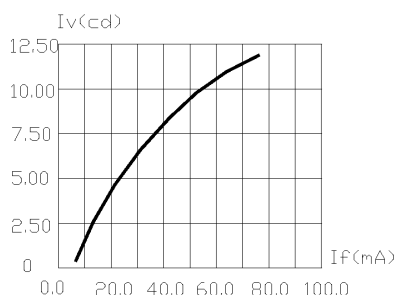


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

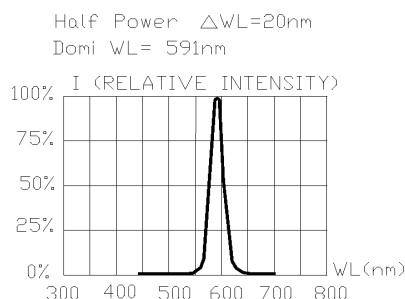


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

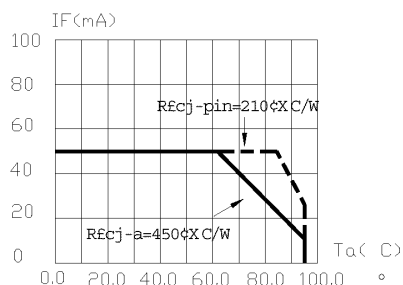


FIG.5 MAXIMUM FORWARD DC CURRENT VS. TEMPERATURE. DERATING BASED ON  $T_{jmax}=105^{\circ}C$

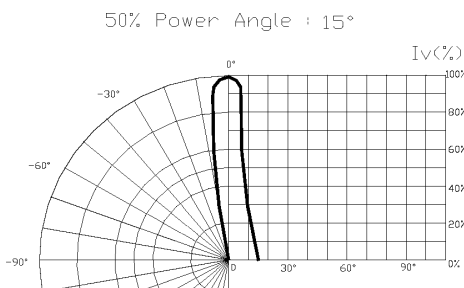


FIG.6 SPATIAL DISTRIBUTION.

- 1.Cathode PAD Area ( $0.18 \times 0.18\text{inch}^2$ )
- 2.Height above nominal seating plane in inches(0.3inch)