

LC503TPG1-15H-A

Features

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

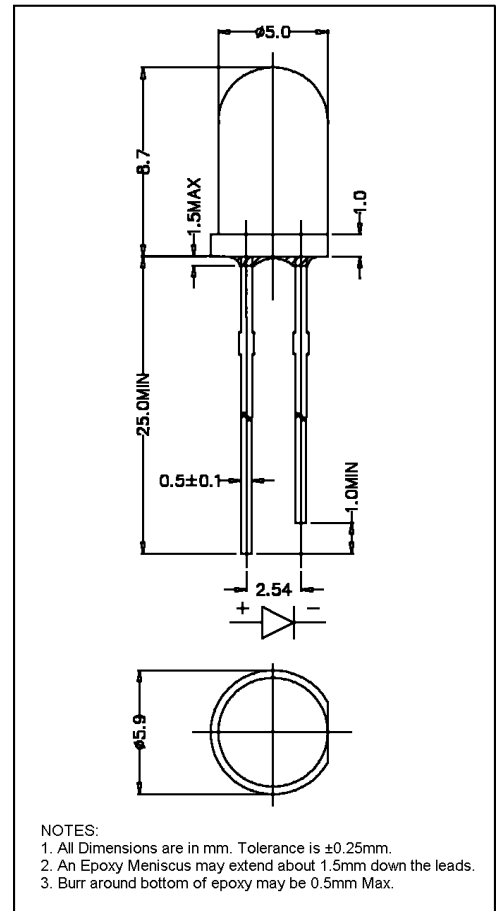
Applications

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	V
Power Dissipation	P_D	100.00	mW
Operating Temperature	T_{opr}	$-40 \sim +95$	$^\circ\text{C}$
Storage Temperature	T_{stg}	$-40 \sim +100$	$^\circ\text{C}$
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	$I_F=20\text{mA}$	—	3.40	4.00	V
Reverse Current	I_R	$V_R=5\text{V}$	—	—	100	μA
Luminous Intensity	I_v	$I_F=20\text{mA}$	12000.00	23000.00	—	mcd
Viewing Angle	$2\theta^{1/2}$	—	—	15°	—	deg.
Peak Wavelength	λ_p	$I_F=20\text{mA}$	—	520	—	nm
Dominant Wavelength	λ_d	$I_F=20\text{mA}$	—	525	—	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F=20\text{mA}$	—	38	—	nm

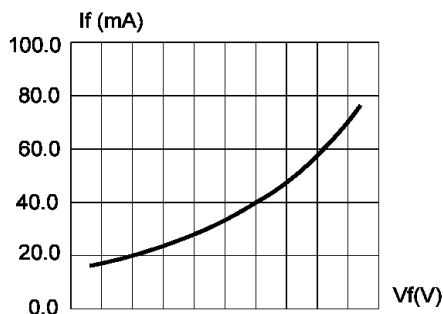


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

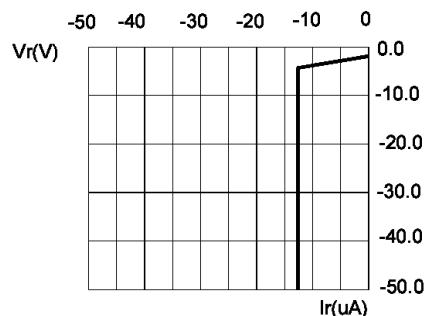


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

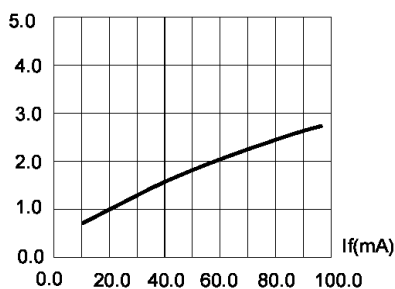


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

Half Power Δ WL=38nm
Domi WL= 525nm
I (RELATIVE LUMINOUS INTENSITY)

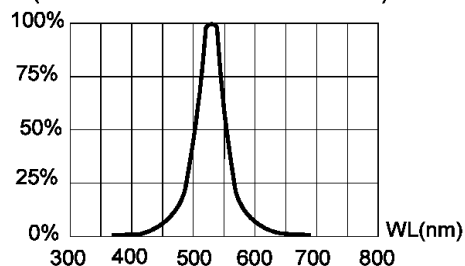


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

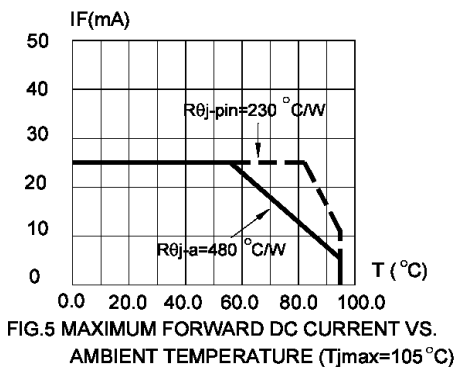


FIG.5 MAXIMUM FORWARD DC CURRENT VS. AMBIENT TEMPERATURE ($T_{jmax}=105^{\circ}\text{C}$)

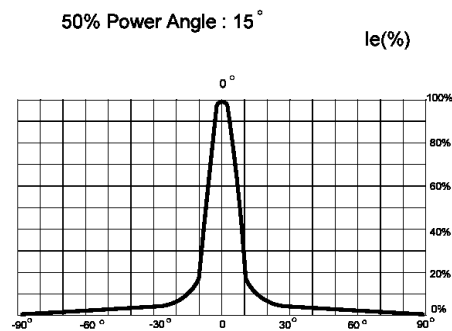


FIG.6 FAR FIELD PATTERN

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