

LC503AHR2-30P-A

Features

5mm Package
High Optical Power
High Luminous Intensity
Slightly Diffused Lens
All Plastic Mold Type
LEAD FREE



ATTENTION

OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

Applications

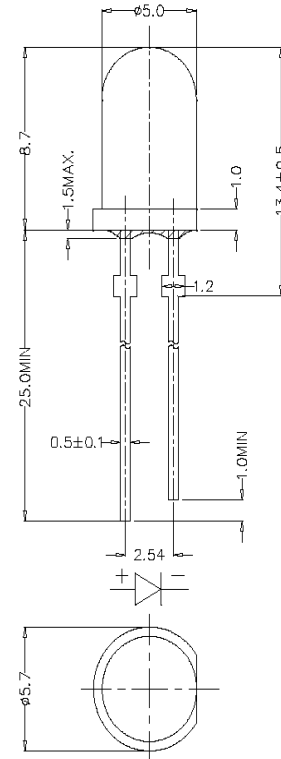
Outdoor Message Centers
VMS
Automotive Interior Lighting
Traffic Signals
Pedestrian Signals
Decorative Lighting

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Unit
Forward Current	I _F	50	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	130.00	mW
Operating Temperature	T _{opr}	-40 ~ +95	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Soldering Temperature	T _{sol}	260	°C
Soldering Time	—	for 3 sec. max	—

Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =20mA	—	2.10	2.60	V
Reverse Current	I _R	V _R =5V	—	—	100	μA
Luminous Intensity	I _v	I _F =20mA	2130.00	3500.00	—	mcd
Viewing Angle	2θ ^{1/2}	—	—	30°	—	deg.
Peak Wavelength	λ _p	I _F =20mA	—	632	—	nm
Dominant Wavelength	λ _d	I _F =20mA	—	624	—	nm
Spectral Line Half Width	Δλ	I _F =20mA	—	20	—	nm



NOTES: 1. ALL DIMENSIONS ARE IN mm TOLERANCE IS ±0.25mm
UNLESS OTHERWISE NOTED.

2. AN EPOXY MENISCUS MAY EXTEND ABOUT 1.5mm
DOWN THE LEADS.

3. BURR AROUND BOTTOM OF EPOXY MAY BE 0.5 mm MAX.

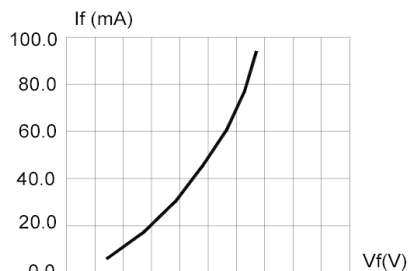


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

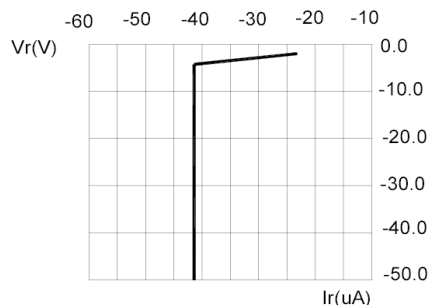


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

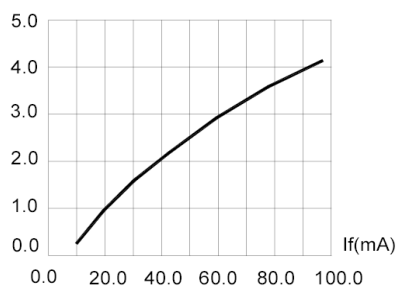


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

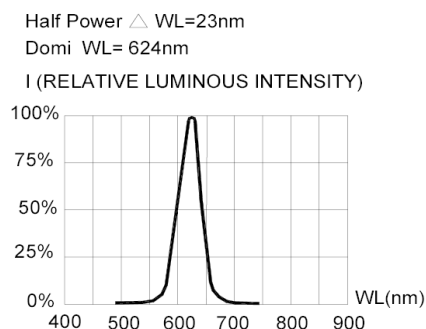


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

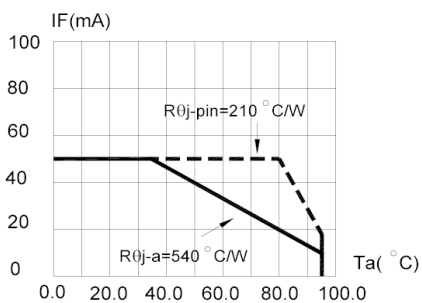


FIG.5 MAXIMUM FORWARD DC CURRENT VS. AMBIENT TEMPERATURE ($T_{jmax}=105^{\circ}\text{C}$)

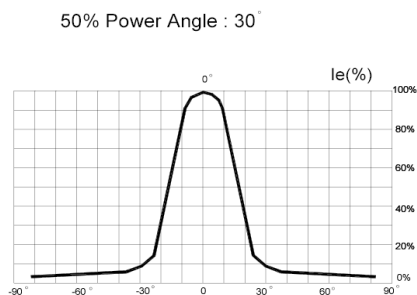


FIG.6 FAR FIELD PATTERN

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