

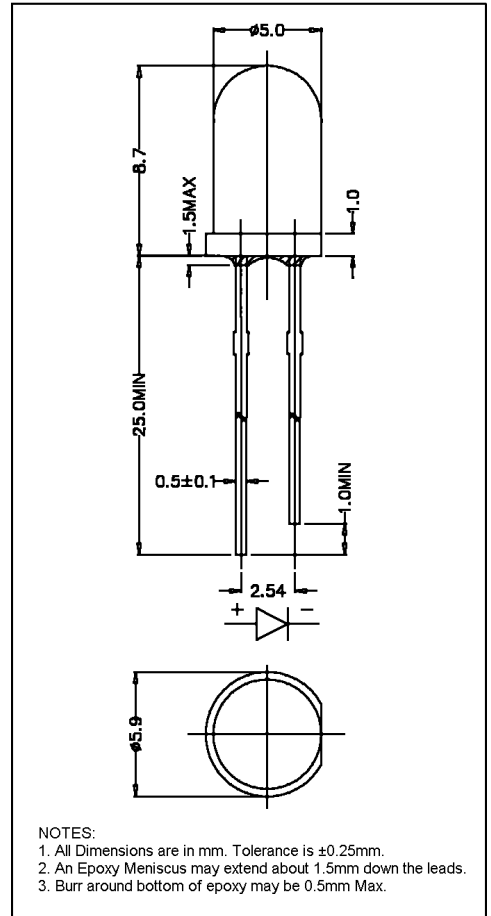
LC503MUV1-30Q-A

Features

5mm Package
 High Radiant Power
 All Plastic Mold Type
 Water Clear Lens
 LEAD FREE

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Test Condition	Unit
Forward Current	I _F	20	-	mA
Pulsed Forward Current	I _{FP}	100.00	PW=0.1mS, Duty=0.1%	mA
Reverse Voltage	V _R	5	-	V
Power Dissipation	P _D	84.00	-	mW
Operating Temperature	T _{opr}	-20 ~ +75	-	°C
Storage Temperature	T _{stg}	-30 ~ +80	-	°C
Junction Temperature	T _j	-	-	°C
Soldering Temperature	T _{sol}	260	for 3 sec. max	°C



Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =20mA	-	3.70	4.20	V
Reverse Current	I _R	V _R =5V	-	-	100	μA
Power Output	PO	I _F =	-	-	-	mW
Radiant Intensity	I _e	I _F =	-	-	-	mW/sr
Half Intensity Beam Angle	θ	-	-	30°	-	deg.
Peak Wavelength	λ _p	I _F =20mA	-	400	-	nm
Spectral Line Half Width	Δλ	I _F =20mA	-	26	-	nm

CAUTION! THIS DEVICE EMITS ULTRAVIOLET RADIATION! This device radiates intense ultraviolet (UV) light when operated. Most of the UV light emitted is not visible. Exposure to UV radiation can be harmful to your health. Protect your eyes and skin during operation. Do not look directly at the device during operation. Exposure to UV light, even for a brief period, can damage your eyes. Do not operate the device unless you have had proper safety training and take appropriate precautions. Do not permit children or untrained personnel to operate the device.

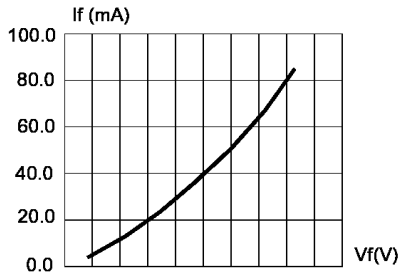


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

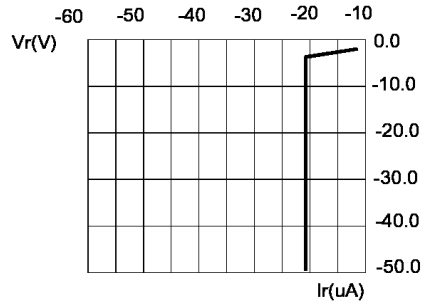


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

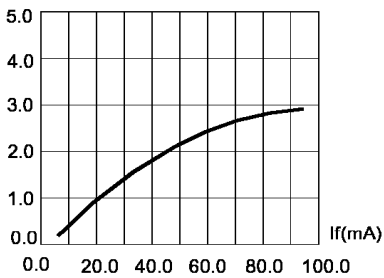


FIG.3 RELATIVE EMISSION INTENSITY VS. FORWARD CURRENT.

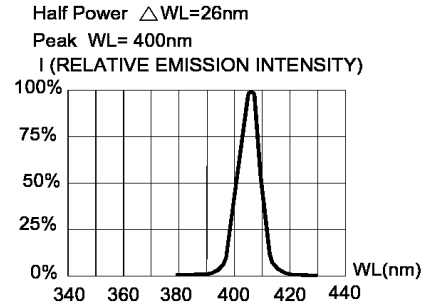


FIG.4 RELATIVE EMISSION INTENSITY VS. WAVELENGTH.

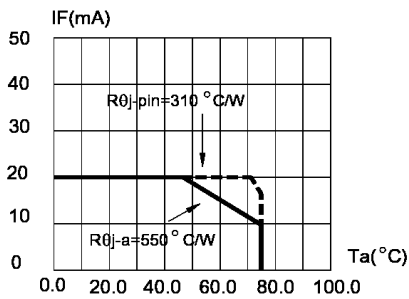


FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE. (Tjmax=95°C)

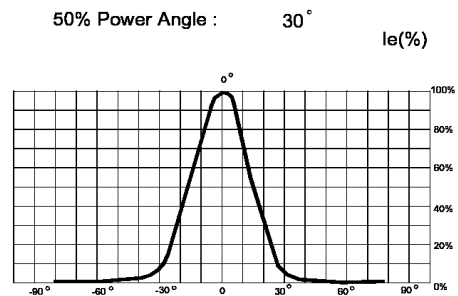


FIG.6 FAR FIELD PATTERN.

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