

LM1-PBL1-11

Applications

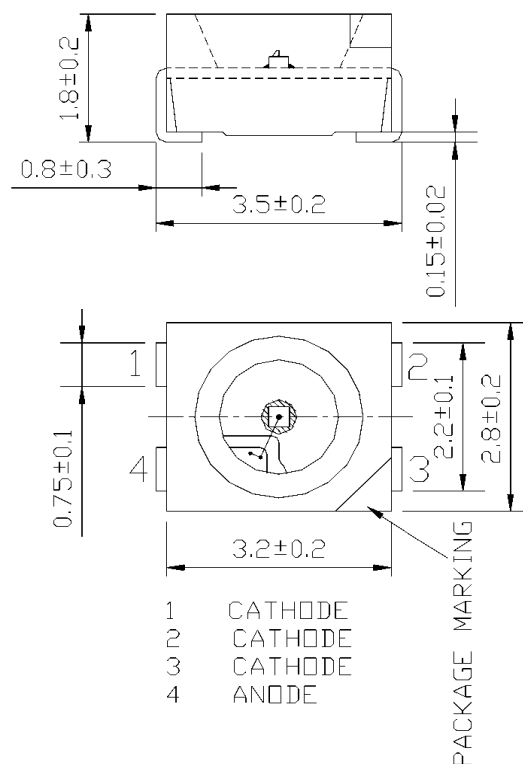
Indicators
Illuminations
LCD Back lights
Automobile Applications
RGB Full color displays

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Unit
Forward Current	I _F	30	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	140.00	mW
Operating Temperature	T _{opr}	-40 ~ +100	°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 =30mA	—	3.90	4.60	V
Reverse Current	I _R	V _R =5V	—	—	10	μA
Luminous Intensity	I _v	I _F =30mA	140.00	200.00	—	mcd
Viewing Angle	2θ ^{1/2}	—	—	120°	—	deg.
Peak Wavelength	λ _p	I _F =30mA	—	465	—	nm
Dominant Wavelength	λ _d	I _F =30mA	—	470	—	nm
Spectral Line Half Width	Δλ	I _F =30mA	—	28	—	nm



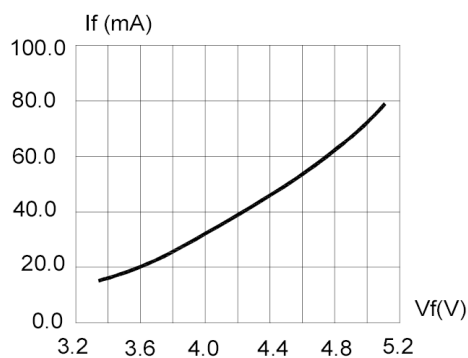


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

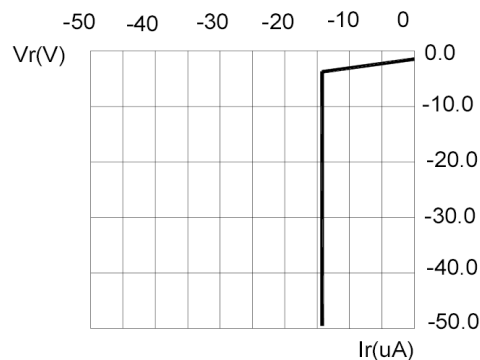
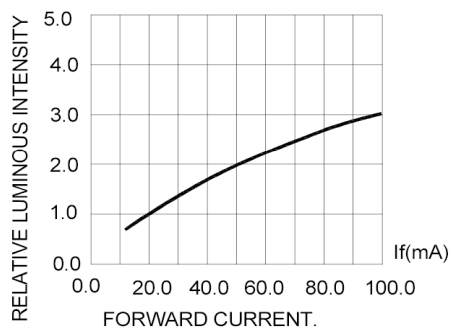


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.



Half Power $\Delta WL = 28nm$

Dom WL = 470nm

I (RELATIVE LUMINOUS INTENSITY)

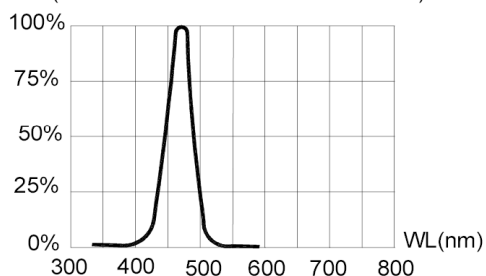


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

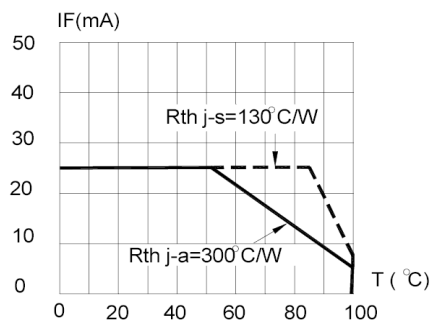


FIG.5 MAXIMUM FORWARD DC CURRENT VS. TEMPERATURE. DERATING BASED ON $T_{jmax} = 110^{\circ}C$

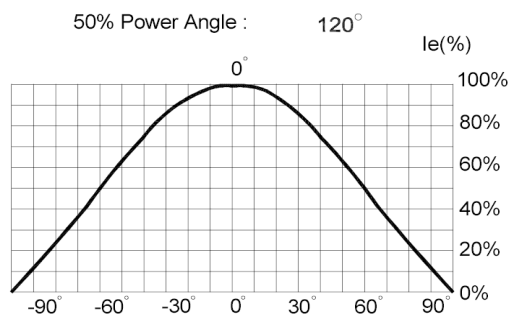


FIG.6 SPATIAL DISTRIBUTION.