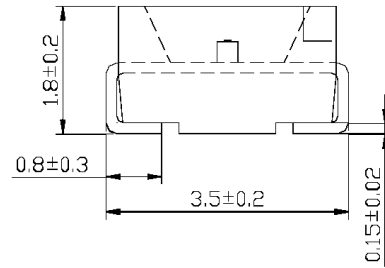


LM1-PWN-01-N1

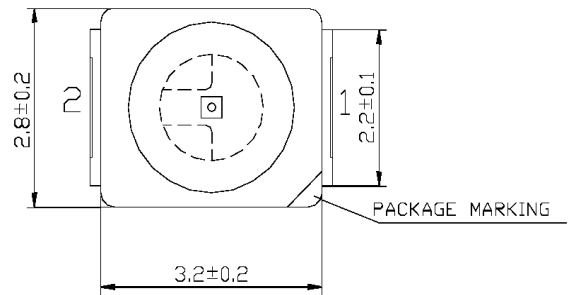
Features

Industry Standard 1210 PLCC Package (3.2 x 2.8mm)
 High Operating Temperature Range: $-40^{\circ} \sim +100^{\circ} \text{C}$
 High luminosity with low power consumption
 120° Viewing Angle
 Wave and Re-flow Solderable



Applications

Indicators
 Illuminators
 LCD Backlights
 Automobile Applications



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}	$-40 \sim +100$	$^{\circ}\text{C}$
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	$V_R=5\text{V}$	-	-	10	μA
Luminous Intensity	I_v	$I_F=20\text{mA}$	355.00	600.00	-	mcd
Viewing Angle	$2\theta^{1/2}$	-	-	120°	-	deg.
Peak Wavelength	λ_p	$I_F=20\text{mA}$	-	465	-	nm
Dominant Wavelength	λ_d	$I_F=20\text{mA}$	-	X=.31, Y=.32	-	nm
Spectral Line Half Width	$\Delta\lambda$	$I_F=20\text{mA}$	-	28	-	nm

LM1-PWN-01-N1 Graphs

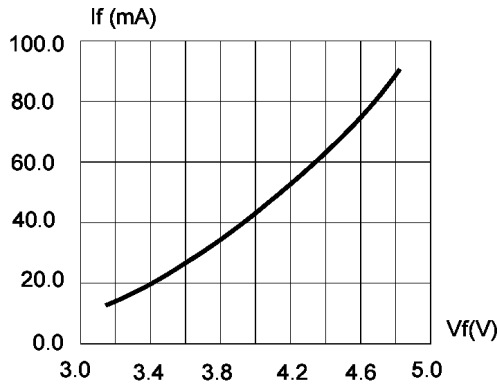


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

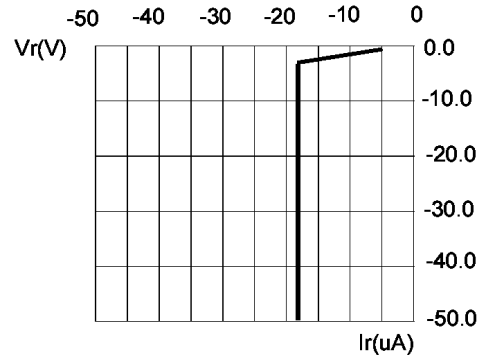


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

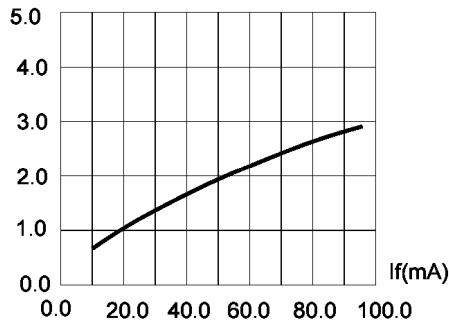


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

Half Power $\Delta WL = 150nm$

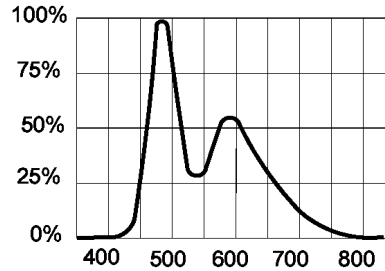


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

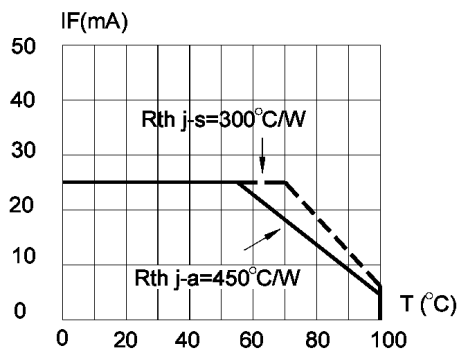


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON $T_{jmax} = 110^{\circ}C$

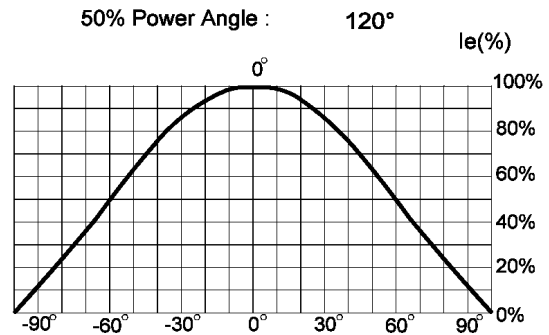


FIG.6 FAR FIELD PATTERN