

LM2-AHR1-F1

Features

High Intensity
High Reliability
Lead Free

Applications

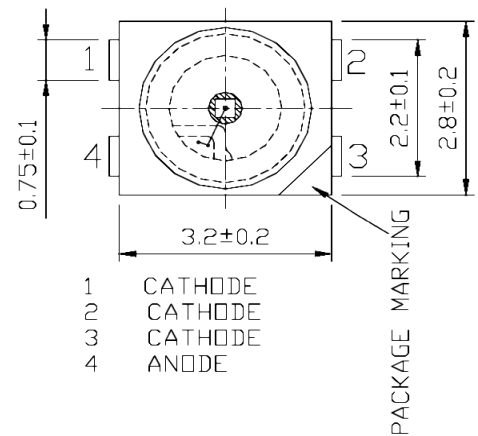
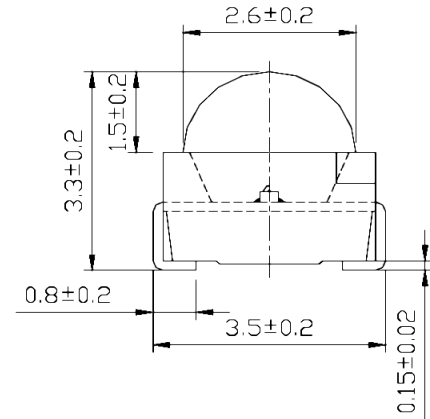
Traffic Light
Backlighting
Automotive Use
Marker Lights
Signal and Symbol Luminaire

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Unit
Forward Current	I _F	70	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	210.00	mW
Operating Temperature	T _{opr}	-40 ~ +100	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Soldering Temperature	T _{sol}	260	°C
Soldering Time	-	for 5 sec. max	-

Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =50mA	-	2.40	3.00	V
Reverse Current	I _R	V _R =5V	-	-	10	μA
Luminous Intensity	I _v	I _F =50mA	1800.00	2500.00	-	mcd
Viewing Angle	2θ ^{1/2}	-	-	50°	-	deg.
Peak Wavelength	λ _p	I _F =50mA	-	632	-	nm
Dominant Wavelength	λ _d	I _F =50mA	-	624	-	nm
Spectral Line Half Width	Δλ	I _F =50mA	-	20	-	nm



LM2-AHR1-F1 Graphs

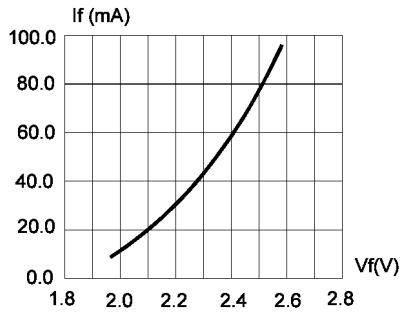


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

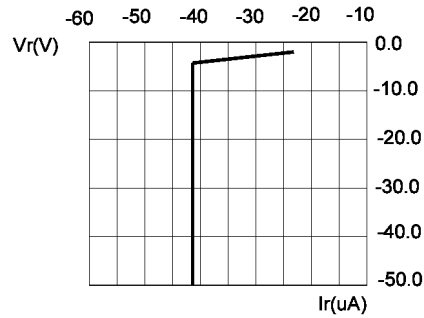


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

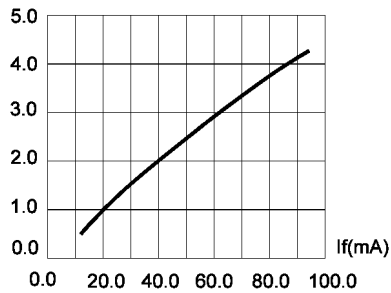


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

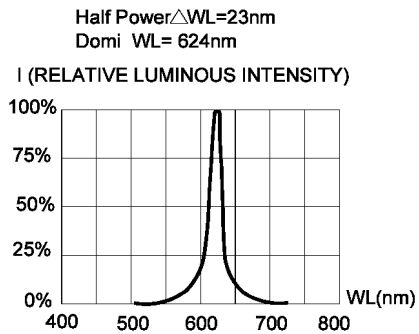


FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

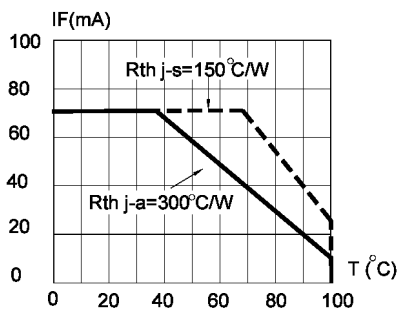


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON $T_{jmax}=110^{\circ}\text{C}$

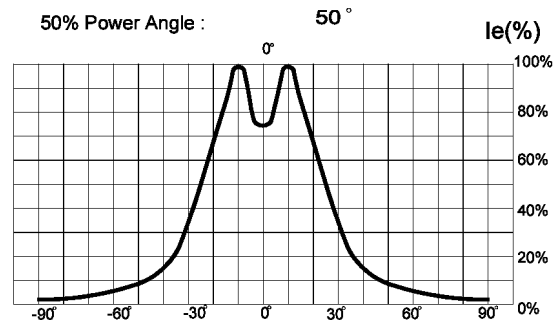


FIG.6 FAR FIELD PATTERN