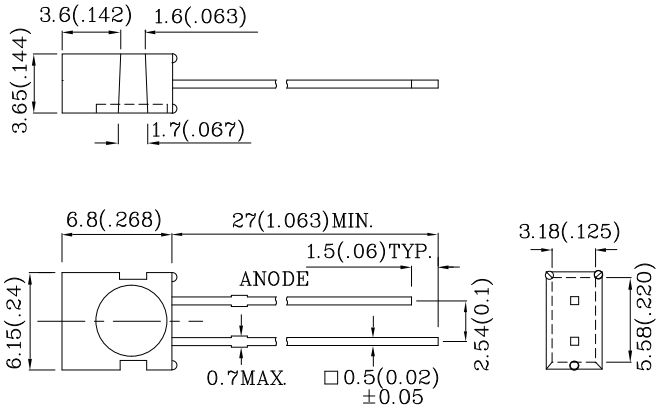
SunLED
www.SunLED.com

Part Number: **EMR21D**

3.65x6.15mm SINGLE CHIP LED LIGHT BAR

Features

- ●FLAT RECTANGULAR LIGHT EMITTING SURFACE.
- ●SINGLE COLOR.
- ●IDEAL AS FLUSH MOUNTED PANEL INDICATORS.
- ●EXCELLENT ON/OFF CONTRAST.
- ●LONG LIFE - SOLID STATE RELIABILITY.
- ●THIS SERIES ARE TIN-DIPPED.
- ●RoHS COMPLIANT.



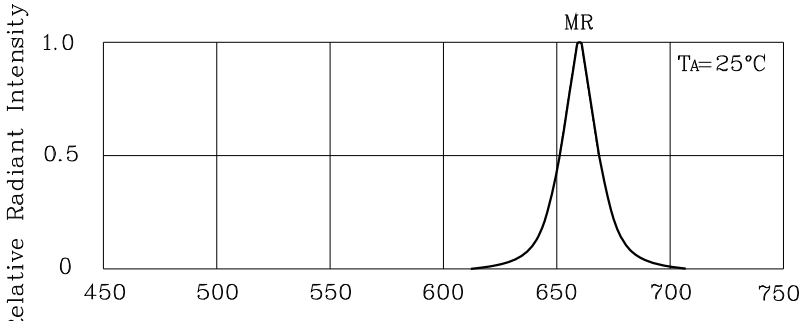
Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.25(0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

Absolute Maximum Ratings (T_A=25°C)		**MR (GaAlAs)**	**Unit**
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	iFS	155	mA
Power Dissipation	P_T	75	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]	260°C For 3 Seconds		
Lead Solder Temperature [5mm Below Package Base]	260°C For 5 Seconds		

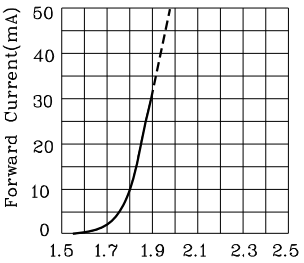
Operating Characteristics (T_A=25°C)		**MR (GaAlAs)**	**Unit**
Forward Voltage (Typ.) (I_F=20mA)	VF	1.85	V
Forward Voltage (Max.) (I_F=20mA)	VF	2.5	V
Reverse Current (Max.) (V_R=5V)	IR	10	uA
Wavelength Of Peak Emission (Typ.) (I_F=20mA)	λ P	660	nm
Wavelength Of Dominant Emission (Typ.) (I_F=20mA)	λ D	640	nm
Spectral Line Full Width At Half-Maximum (Typ.) (I_F=20mA)	Δλ	20	nm
Capacitance (Typ.) (V_F=0V, f=1MHz)	C	45	pF

Part Number	Emitting Color	Emitting Material	Lens-color	Luminous Intensity (IF=20mA) mcd		Wavelength nm λ P	Viewing Angle 2 θ 1/2
				min.	typ.		
EMR21D	Red	GaAlAs	Red Diffused	36	89	660	100°

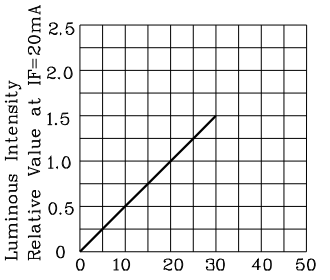


RELATIVE INTENSITY Vs. WAVELENGTH

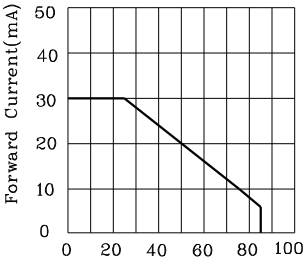
❖ **MR**



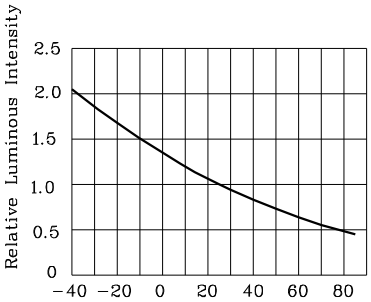
FORWARD CURRENT Vs. FORWARD VOLTAGE



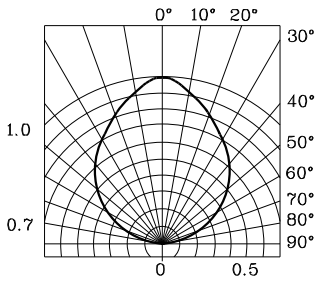
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE

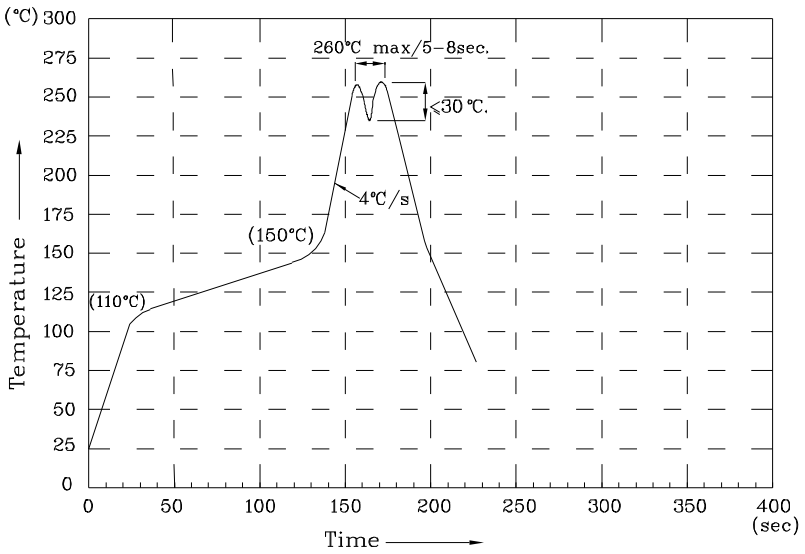


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Wave Soldering Profile For Lead-free Through-hole LED.



NOTES:

1. Recommend the wave temperature 245℃~260℃. The maximum soldering temperature should be less than 260℃.
2. Do not apply stress on epoxy resins when temperature is over 85 degree℃.
3. The soldering profile apply to the lead free soldering (Sn/Cu/Ag alloy).
4. No more than once.

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity/ luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

PACKING & LABEL SPECIFICATIONS EMR21D

