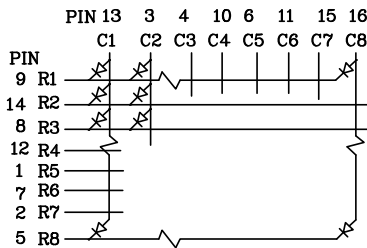


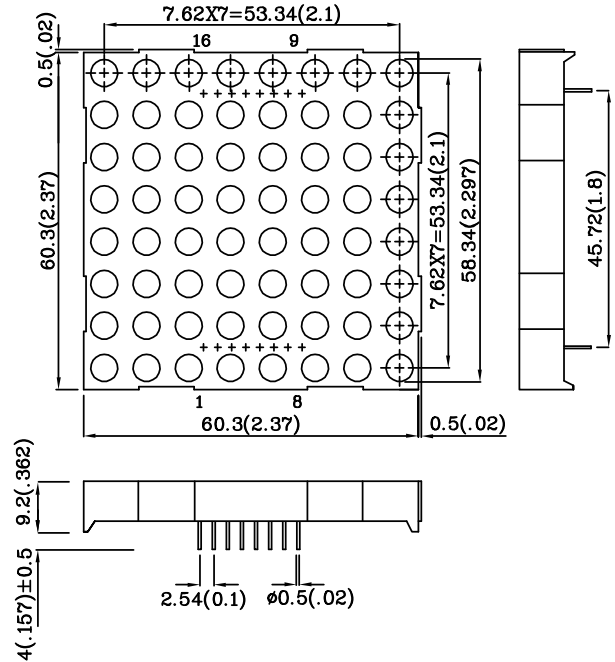
Features

- 2.3 INCH MATRIX HEIGHT.
- DOT SIZE 5mm.
- LOW CURRENT OPERATION.
- HIGH CONTRAST AND LIGHT OUTPUT.
- COMPATIBLE WITH ASCII AND EBCDIC CODES.
- STACKABLE HORIZONTALLY.
- COLUMN CATHODE AND COLUMN ANODE AVAILABLE.
- EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- MULTICOLOR AVAILABLE.
- MECHANICALLY RUGGED.
- STANDARD :GRAY FACE, WHITE DOT.
- RoHS COMPLIANT.



Notes:

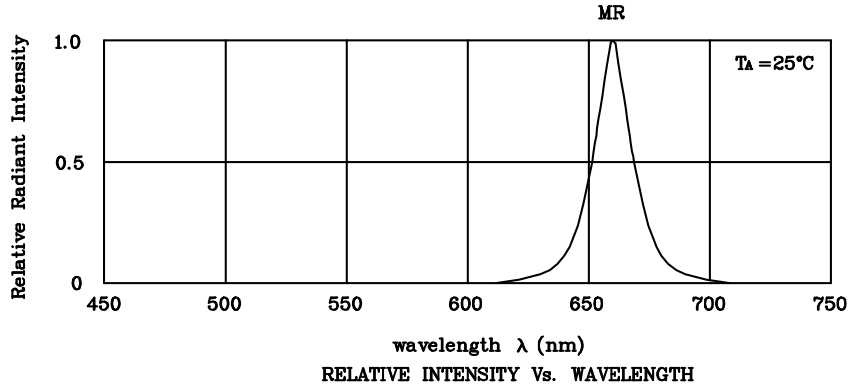
1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01")$ unless otherwise noted.



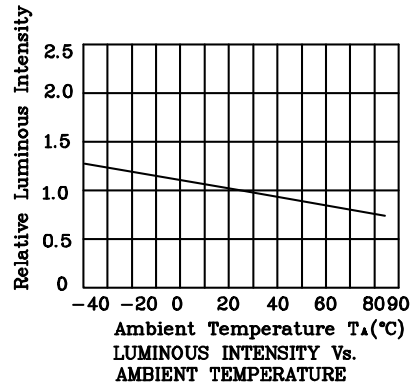
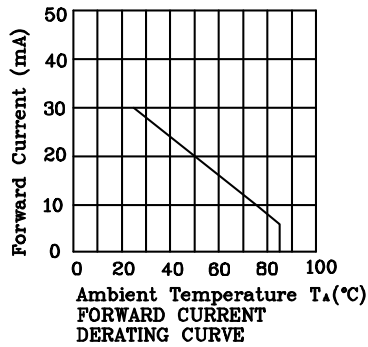
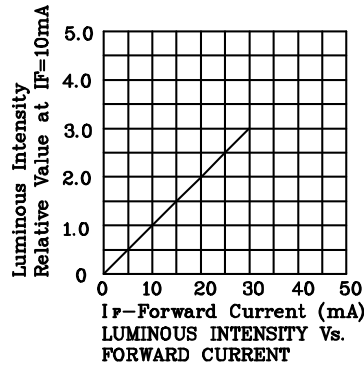
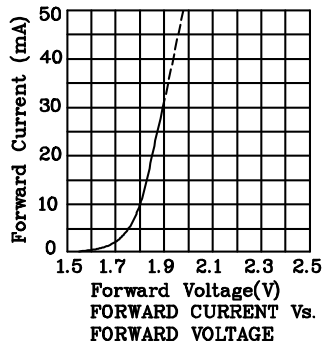
Absolute Maximum Ratings ($T_A=25^\circ\text{C}$)		MR (GaAlAs)	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	30	mA
Forward Current (Peak) 1/10 Duty Cycle 0.1ms Pulse Width	i_{FS}	155	mA
Power Dissipation	P_T	100	mW
Operating Temperature	T_A	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +85	
Lead Solder Temperature [2mm Below Package Base]	260°C For 5 Seconds		

Operating Characteristics ($T_A=25^\circ\text{C}$)		MR (GaAlAs)	Unit
Forward Voltage (Typ.) ($I_F=10\text{mA}$)	V_F	1.8	V
Forward Voltage (Max.) ($I_F=10\text{mA}$)	V_F	2.5	V
Reverse Current ($V_R=5\text{V}$)	I_R	10	μA
Wavelength of Peak Emission ($I_F=10\text{mA}$)	λ_P	660	nm
Wavelength of Dominant Emission ($I_F=10\text{mA}$)	λ_D	640	nm
Spectral Line Full Width At Half-Maximum ($I_F=10\text{mA}$)	$\Delta\lambda$	20	nm
Capacitance ($V_F=0\text{V}$, $f=1\text{MHz}$)	C	45	pF

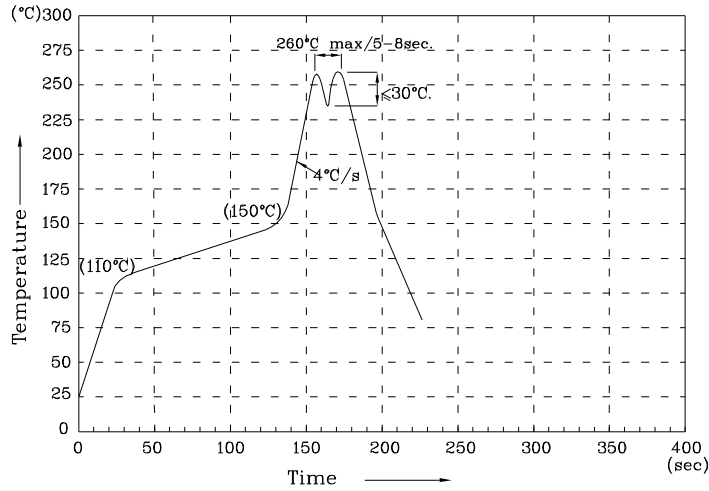
Part Number	Emitting Color	Emitting Material	Luminous Intensity ($I_F=10\text{mA}$) ucd	Wavelength nm λ_P	Description
MMR60A8	Red	GaAlAs	min. 12000 typ. 43990	660	Column Anode



❖ MR



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



NOTES:

1. Recommend the wave temperature 245°C~260°C. The maximum soldering temperature should be less than 260°C.
2. Do not apply stress on epoxy resins when temperature is over 85 degree°C.
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.