

**SPECIFICATION FORM****FEATURES**

- ◇  $\Phi$ 1.9MM DOT SIZE
- ◇ 20.20MM×20.20MM OUTLINE
- ◇ 8×8 FORMAT
- ◇ SINGLE COLOR DOT MATRIX
- ◇ LOW POWER REQUIREMENT
- ◇ EASY ASSEMBLY
- ◇ SOLID STATE RELIABILITY

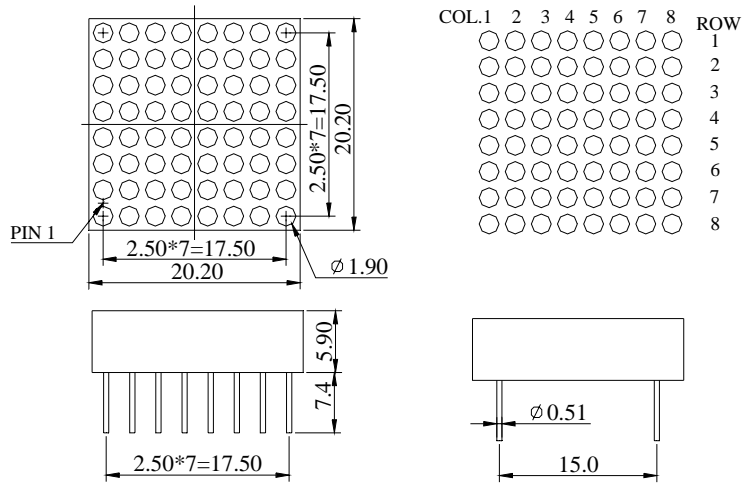
**DESCRIPTION**

The REC-M788AG is a  $\phi$ 1.90 dot size, 20.20mm×20.20mm outline, 8×8 format, single color, row anode, LED dot matrix display. This display utilizes yellow-green LED chips fabricated from GaP epiwafer on GaP substrate grown by liquid phase epitaxy. The devices have black face and white dots.

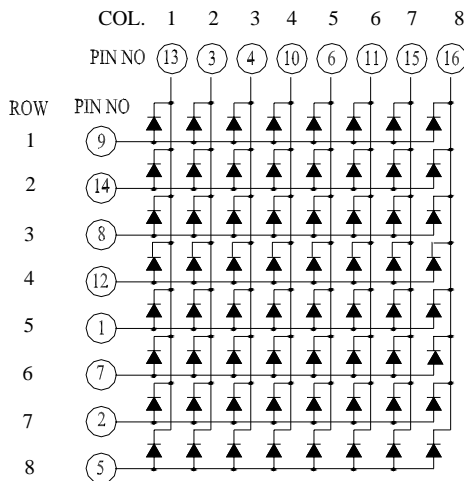
**DEVICE**

PART NO.	EMITTING COLOR	DESCRIPTION
REC-M788AG	Yellow-Green	Row Anode, Black face, White dot

**PACKAGE DIMENSION****Part No. :** REC-M788AG**Reference No. :** SP200102**Date :** 05-3-15**Page :** 1 of 3



**INTERNAL CIRCUIT DIAGRAM  
PIN CONNECTION**



PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Anode Row 5	9	Anode Row 1
2	Anode Row 7	10	Cathode column 4
3	Cathode column 2	11	Cathode column 6
4	Cathode column 3	12	Anode Row 4
5	Anode Row 8	13	Cathode column 1
6	Cathode column 5	14	Anode Row 2
7	Anode Row 6	15	Cathode column 7
8	Anode Row 3	16	Cathode column 8

**ABSOLUTE MAXIMUM RATING AT  $T_A=25^{\circ}\text{C}$** 

PARAMETER	SYMBOL	MAXIMUM	UNIT
Power Dissipation per dot	$P_{AD}$	75	mW
Peak Forward Current per dot	$I_{PF}$	80	mA
Continuous Forward Current per dot	$I_{AF}$	20	mA
Reverse Voltage per dot	$V_R$	5	V
Operating Temperature Range, $T_{opr}$		- 25° C to + 60° C	
Storage Temperature Range, $T_{stg}$		- 30° C to + 85° C	
Solder Temperature : 1 / 16 inch below seating plane for 3 seconds at 260° C			

**ELECTRO - OPTICAL CHARACTERISTICS AT  $T_A=25^{\circ}\text{C}$** 

PARAMETER	UNIT	MIN	TYPE	MAX
Luminous Intensity per chip, $I_V (I_F=20\text{mA})$	mcd	6	9	13
Peak Emission Wavelength, $\lambda_P (I_F=20\text{mA})$	nm		570	
Special Line Half-Width, $\Delta\lambda (I_F=20\text{mA})$	nm		20	
Forward Voltage per chip, $V_F (I_F=20\text{mA})$	V	2.1	2.3	2.5
Reverse Current per chip, $I_R, (V_R=5\text{V})$	$\mu\text{A}$			100
Luminous Intensity Matching Ratio, $I_{V-m} (I_F=20\text{mA})$				1.5:1