



# RAYCONN ELECTRONICS CO., LTD.

## SPECIFICATION FORM

### FEATURES

- ◇ Φ3.0MM DOT SIZE
- ◇ 32.0MM×32.0MM OUTLINE
- ◇ 8×8 FORMAT
- ◇ SINGLE COLOR DOT MATRIX
- ◇ LOW POWER REQUIREMENT
- ◇ EASY ASSEMBLY
- ◇ SOLID STATE RELIABILITY

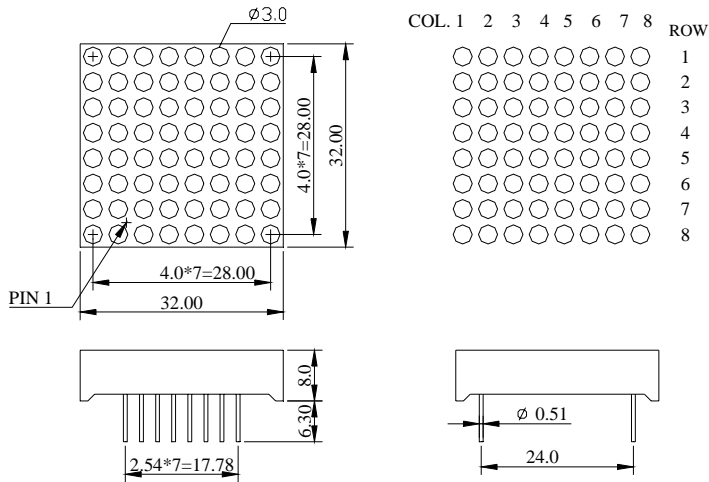
### DESCRIPTION

The REC-M1388ASR is a  $\phi$ 3.0 dot size, 32.0mm×32.0mm outline, 8×8 format, single color, row anode, LED dot matrix display. This display utilizes green LED chips fabricated from GaP epiwafer on GaP substrate grown by liquid phase epitaxy. The devices have black face and white dots.

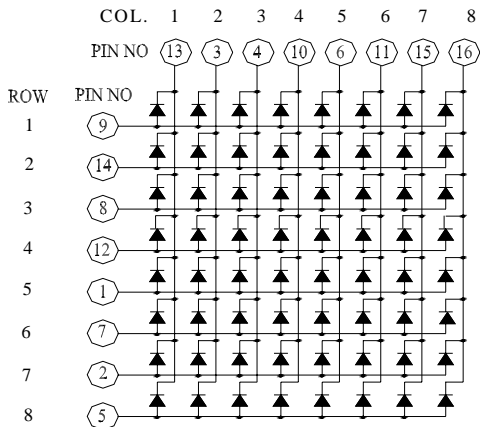
### DEVICE

PART NO.	EMITTING COLOR	DESCRIPTION
REC-M1388AG	Yellow-Green	Row Anode, Black face, White dot

**PACKAGE DIMENSION**



**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<sub>A</sub>=25° C**

PARAMETER	SYMBOL	MAXIMUM	UNIT
Power Dissipation per dot	P <sub>AD</sub>	75	mW
Peak Forward Current per dot (1/10 duty cycle, 0.1ms pulse width)	I <sub>PF</sub>	100	mA
Continuous Forward Current per dot	I <sub>AF</sub>	20	mA
Reverse Voltage per dot	V <sub>R</sub>	5	V
Operating Temperature Range, T <sub>opr</sub>		- 25° C to + 60° C	
Storage Temperature Range, T <sub>stg</sub>		- 30° C to + 85° C	
Solder Temperature : 1 / 16 inch below seating plane for 3 seconds at 260° C			

**ELECTRO - OPTICAL CHARACTERISTICS AT T<sub>A</sub>=25° C**

PARAMETER	UNIT	MIN	TYPE	MAX
Luminous Intensity per chip, I <sub>V</sub> ( I <sub>F</sub> =20mA)	mcd	6	9	13
Peak Emission Wavelength, λ <sub>p</sub> ( I <sub>F</sub> =20mA)	nm		570	
Special Line Half-Width, Δλ ( I <sub>F</sub> =20mA)	nm		20	
Forward Voltage per chip, V <sub>F</sub> ( I <sub>F</sub> =20mA)	V	2.0	2.1	2.3
Reverse Current per chip, I <sub>R</sub> , ( V <sub>R</sub> =5V)	μA			100
Luminous Intensity Matching Ratio, I <sub>V-m</sub> ( I <sub>F</sub> =20mA)				2 : 1