

RAYCONN ELECTRONICS CO., LTD.

SPECIFICATION FORM

FEATURES

- ◇ Φ3.0MM DOT SIZE
- ◇ 32.00MM×32.00MM OUTLINE
- ◇ 8×8 FORMAT
- ◇ SINGLE COLOR DOT MATRIX
- ◇ LOW POWER REQUIREMENT
- ◇ EASY ASSEMBLY
- ◇ SOLID STATE RELIABILITY

DESCRIPTION

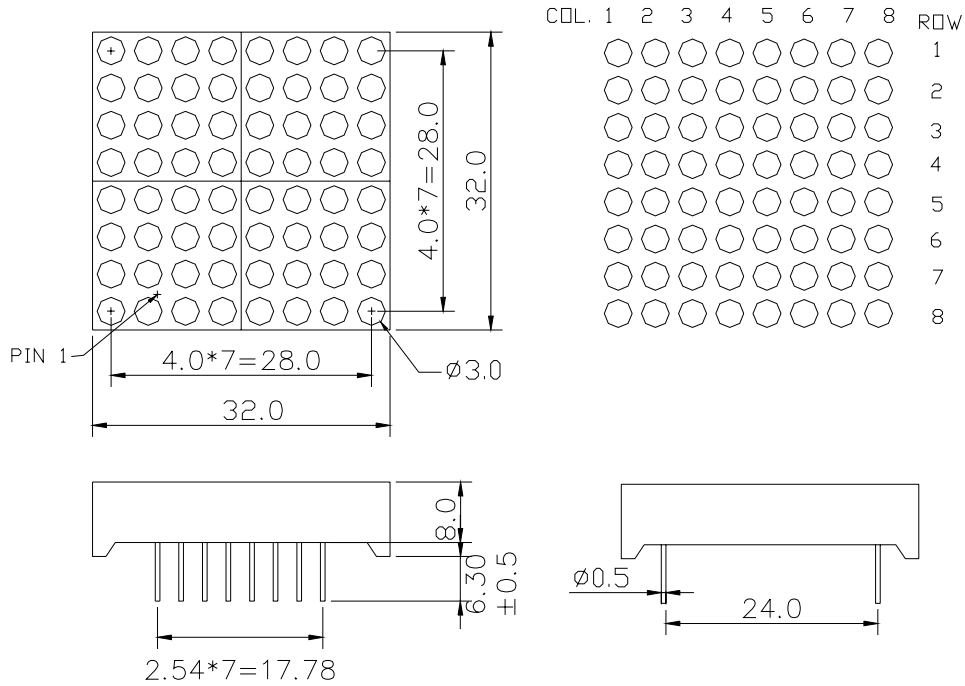
The REC-M1388ASR is a φ3.0 dot size, 32.0mm×32.0mm outline, 8×8 format, single color, row anode, LED dot matrix display. This display utilizes green LED chips fabricated from GaP epiwafer on GaP substrate grown by liquid phase epitaxy. The devices have black face and white dots.

DEVICE

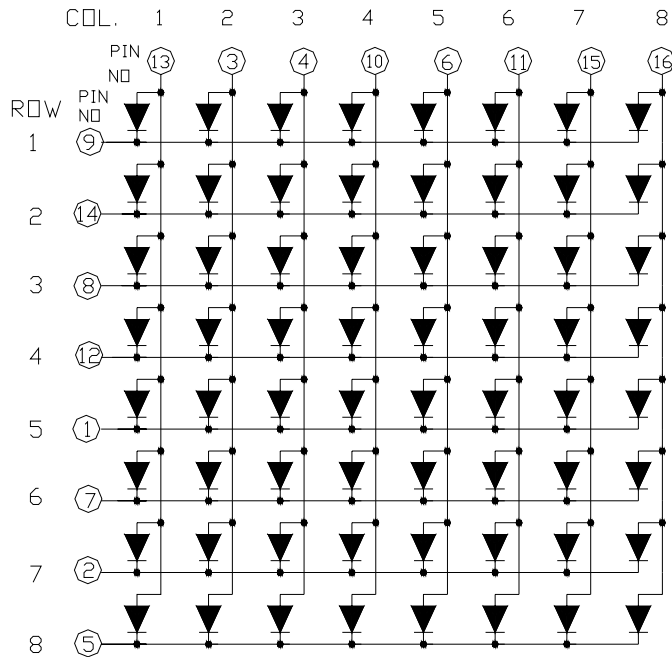
| PART NO. | EMITTING COLOR | DESCRIPTION |
|-------------|----------------|---|
| REC-M1388CG | Yellow-Green | Column Cathode, Black face, White dots |

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PACKAGE DIMENSION



INTERNAL CIRCUIT DIAGRAM



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ABSOLUTE MAXIMUM RATING AT T_A=25°C

| PARAMETER | SYMBOL | MAXIMUM | UNIT |
|---|-----------------|------------------|------|
| Power Dissipation per dot | P _{AD} | 60 | mW |
| Peak Forward Current per dot (1/10 Duty Cycle, 0.1ms Pulse Width) | I _{PF} | 100 | 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 + 80°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°C

| PARAMETER | UNIT | MIN | TYPE | MAX |
|--|------|------|------|-------|
| Luminous Intensity per dot, I _V (I _F =20mA) | mcd | 10 | 12 | 15 |
| Peak Emission Wavelength, λ _p (I _F =20mA) | nm | | 570 | |
| Special Line Half-Width, Δλ (I _F =20mA) | nm | | 20 | |
| Forward Voltage per dot, V _F (I _F =20mA) | V | 2.00 | 2.10 | 2.30 |
| Reverse Current per dot, I _R , (V _R =5V) | μA | | | 100 |
| Luminous Intensity Matching Ratio, I _{V-m} (I _F =20mA) | | | | 2 : 1 |

Notes:

- (1) All dimensions are in millimeters.
- (2) Tolerance is ±0.25mm unless otherwise noted.