

**SPECIFICATION FORM****FEATURES**

- ◇  $\Phi$ 10.0MM DOT SIZE
- ◇ 76.20MM×121.92MM OUTLINE
- ◇ 5×8 FORMAT
- ◇ DUAL COLOR DOT MATRIX
- ◇ LOW POWER REQUIREMENT
- ◇ HIGH CONTRAST
- ◇ HIGH BRIGHTNESS
- ◇ SOLID STATE RELIABILITY

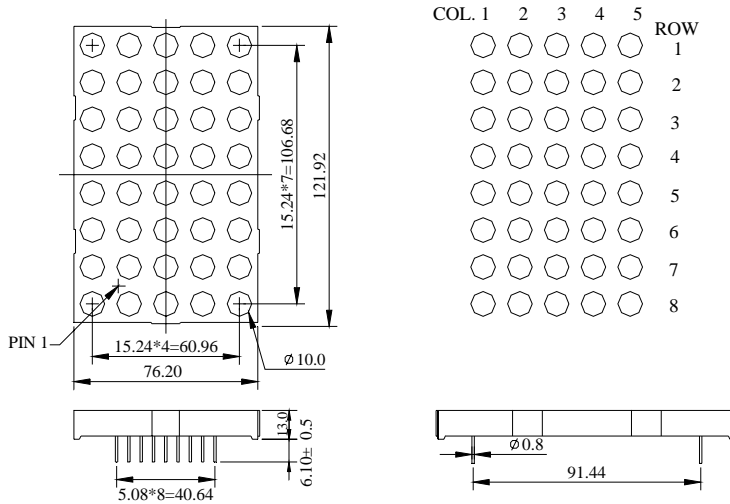
**DESCRIPTION**

The REC-M4058ASRG is a  $\phi$ 10.0 dot size, 76.20mm×121.92mm outline, 5×8 format, dual color (super-red and yellow-green), row anode, LED dot matrix display. This display utilizes super-red LED chips fabricated from GaAlAs epiwafer on GaAs substrate grown by liquid phase epitaxy and yellow green LED chips fabricated from GaP epiwafer on GaP substrate grown by liquid phase epitaxy. The devices have black face and white dots.

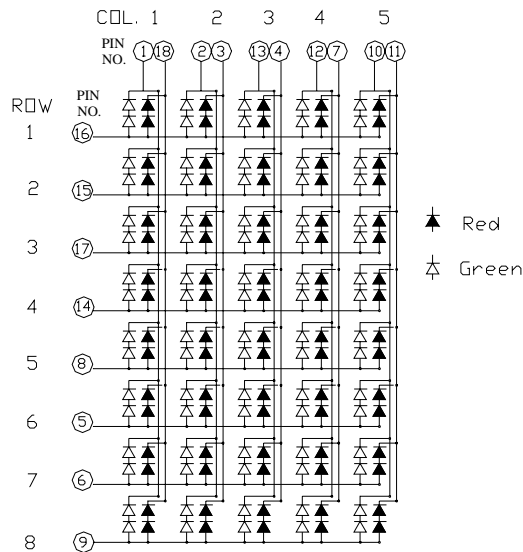
**DEVICE**

<b>PART NO.</b>	<b>EMITTING COLOR</b>	<b>DESCRIPTION</b>
REC-M4058ASRG	Super-Red and Yellow-Green	Row Anode, Black face, White dot

**PACKAGE DIMENSION**



**INTERNAL CIRCUIT DIAGRAM**



**PIN CONNECTION**

PIN NO.	CONNECTION	PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Cathode Col. 1 G	7	Cathode Col. 4 R	13	Cathode Col. 3 G
2	Cathode Col. 2 G	8	Anode Row 5	14	Anode Row 4
3	Cathode Col. 2 R	9	Anode Row 8	15	Anode Row 2
4	Cathode Col. 3 R	10	Cathode Col. 5 G	16	Anode Row 1
5	Anode Row 6	11	Cathode Col. 5 R	17	Anode Row 3
6	Anode Row 7	12	Cathode Col. 4 G	18	Cathode Col. 1 R

**ABSOLUTE MAXIMUM RATING AT T<sub>A</sub>=25°C**

PARAMETER	RED	GREEN
Power Dissipation per dot, P <sub>AD</sub> (mW)	120	150
Peak Forward Current per dot, I <sub>PF</sub> (mA) (1/10 Duty Cycle, 0.1ms pulse width)	100	100
Continuous Forward Current per dot, I <sub>AF</sub> (mA)	20	20
Reverse Voltage per dot, V <sub>R</sub> (V)	10	10
Operating Temperature Range, T <sub>opr</sub>	- 25°C to + 85°C	
Storage Temperature Range, T <sub>stg</sub>	- 30°C to + 90°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	RED			GREEN		
	MIN	TYPE	MAX	MIN	TYPE	MAX
Luminous Intensity per chip, I <sub>V</sub> (mcd, I <sub>F</sub> =20mA)	7	10	15	10	15	20
Peak Emission Wavelength, λ <sub>p</sub> (nm, I <sub>F</sub> =20mA)		645			568	
Domonant Wavelength, λ <sub>d</sub> (nm, I <sub>F</sub> =20mA)		643			573	
Special Line Half-Width, Δλ (nm, I <sub>F</sub> =20mA)		20			30	
Forward Voltage per dot, V <sub>F</sub> (V, I <sub>F</sub> =20mA)	3.20	3.60	4.20	3.60	4.30	5.20
Reverse Current per dot, I <sub>R</sub> (μA, V <sub>R</sub> =5V)			50			50
Luminous Intensity Matching Ratio, I <sub>V-m</sub> (I <sub>F</sub> =20mA)			2 : 1			2 : 1