

SPECIFICATION FORM**FEATURES**

- ◇ Φ 1.9MM DOT SIZE
- ◇ 20.20MM×20.20MM OUTLINE
- ◇ 8×8 FORMAT
- ◇ DUAL COLOR DOT MATRIX
- ◇ LOW POWER REQUIREMENT
- ◇ HIGH CONTRAST
- ◇ HIGH BRIGHTNESS
- ◇ SOLID STATE RELIABILITY

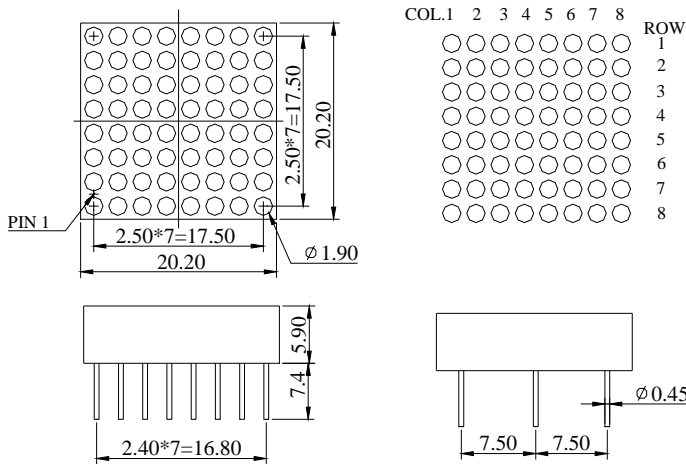
DESCRIPTION

The REC-M788ASRG is a ϕ 1.90 dot size, 20.20mm×20.20mm outline, 8×8 format, dual color, 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.

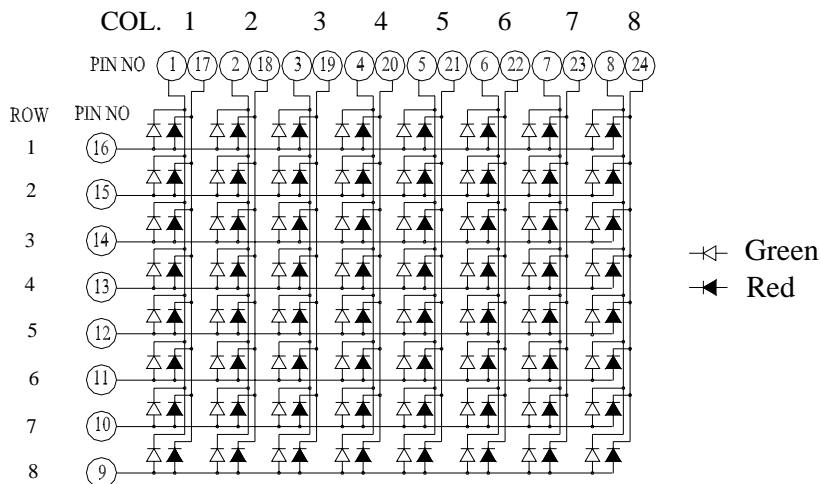
DEVICE

PART NO.	EMITTING COLOR	DESCRIPTION
REC-M788ASRG	Super-red and Yellow-Green	Row anode, Black face, White dots

PACKAGE DIMENSION



INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

PIN NO.	CONNECTION	PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Cathode Col. 1 G	9	Anode Row 8	17	Cathode Col. 1 R
2	Cathode Col. 2 G	10	Anode Row 7	18	Cathode Col. 2 R
3	Cathode Col. 3 G	11	Anode Row 6	19	Cathode Col. 3 R
4	Cathode Col. 4 G	12	Anode Row 5	20	Cathode Col. 4 R
5	Cathode Col. 5 G	13	Anode Row 4	21	Cathode Col. 5 R
6	Cathode Col. 6 G	14	Anode Row 3	22	Cathode Col. 6 R
7	Cathode Col. 7 G	15	Anode Row 2	23	Cathode Col. 7 R
8	Cathode Col. 8 G	16	Anode Row 1	24	Cathode Col. 8 R

ABSOLUTE MAXIMUM RATING AT T_A=25°C

PARAMETER	RED	GREEN
Power Dissipation per dot, P _{AD} (mW)	60	75
Peak Forward Current per dot, I _{PF} (mA)	80	80
Continuous Forward Current per dot, I _{AF} (mA)	20	20
Reverse Voltage per dot, V _R (V)	5	5
Operating Temperature Range, T _{opr}	- 25°C to + 85°C	
Storage Temperature Range, T _{stg}	- 30°C to + 90°C	
Solder Temperature : 1 / 16 inch below seating plane for 3 seconds at 260°C		

ELECTRO - OPTICAL CHARACTERISTICS AT T_A=25°C

PARAMETER	RED			GREEN		
	MIN	TYP	MAX	MIN	TYP	MAX
Luminous Intensity per chip, I _V (mcd, I _F =20mA)	5	7.0	10.0	10	15	20
Peak Emission Wavelength, λ _P (nm, I _F =20mA)		645			568	
Domonant Wavelength, λ _d (nm, I _F =20mA)		640			573	
Special Line Half-Width, Δλ (nm, I _F =20mA)		20			30	
Forward Voltage per dot, V _F (V, I _F =20mA)	1.6	1.80	2.20	1.80	2.15	2.50
Reverse Current per dot, I _R (μA, V _R =5V)			100			100
Luminous Intensity Matching Ratio, I _{V-m} (I _F =20mA)			2 : 1			2 : 1