

SPECIFICATION FORM**FEATURES**

- ◇ Φ 5.0MM DOT SIZE
- ◇ 38.10MM×53.34MM OUTLINE
- ◇ 5×7 FORMAT
- ◇ SINGLE COLOR DOT MATRIX
- ◇ LOW POWER REQUIREMENT
- ◇ EASY ASSEMBLY
- ◇ SOLID STATE RELIABILITY

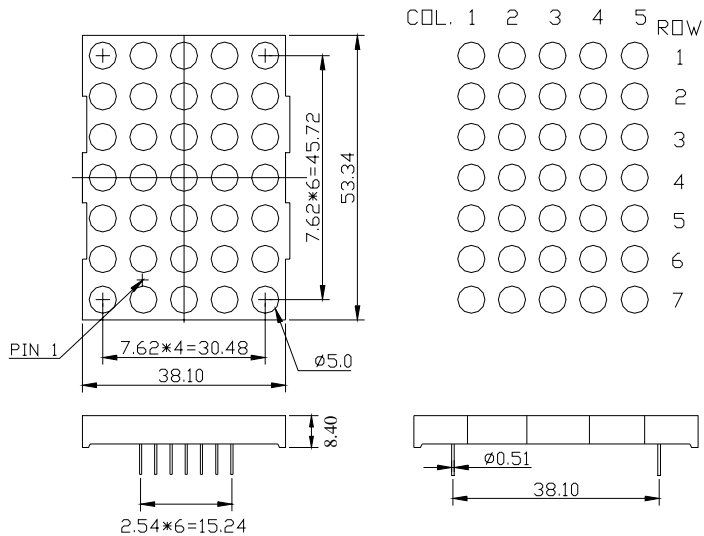
DESCRIPTION

The REC-M2057ASR is a ϕ 5.0 dot size, 38.10mm×53.34mm outline, 5×7 format, single color, row anode, LED dot matrix display. This display utilizes red LED chips fabricated from GaAlAs epiwafer on GaAs substrate grown by liquid phase epitaxy. The devices have black face and white dots.

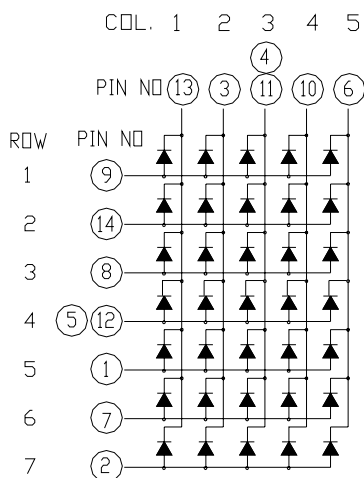
DEVICE

PART NO.	EMITTING COLOR	DESCRIPTION
REC-M2057ASR	Super-Red	Row Anode, Black face, White dots

PACKAGE DIMENSION



INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

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

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

PARAMETER	SYMBOL	MAXIMUM	UNIT
Power Dissipation per dot	P_{AD}	60	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 dot, I_V ($I_F=20\text{mA}$)	mcd	6.0	9.0	13
Peak Emission Wavelength, λ_P ($I_F=20\text{mA}$)	nm		640	
Special Line Half-Width, $\Delta\lambda$ ($I_F=20\text{mA}$)	nm		20	
Forward Voltage per dot, V_F ($I_F=20\text{mA}$)	V	1.6	1.8	2.1
Reverse Current per dot, I_R , ($V_R=5\text{V}$)	μA			100
Luminous Intensity Matching Ratio, I_{V-m} ($I_F=20\text{mA}$)				2 : 1