

**SPECIFICATION FORM****FEATURES**

- ◇  $\Phi$ 3.0MM DOT SIZE
- ◇ 23.0MM×39.10MM OUTLINE
- ◇ 5×7 FORMAT
- ◇ SINGLE COLOR DOT MATRIX
- ◇ LOW POWER REQUIREMENT
- ◇ EASY ASSEMBLY
- ◇ SOLID STATE RELIABILITY

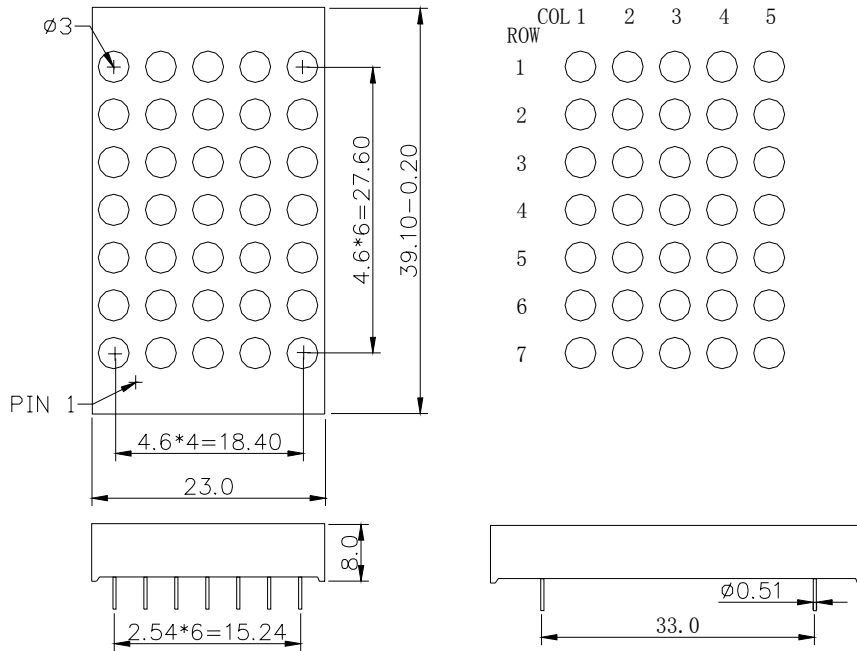
**DESCRIPTION**

The REC-M1057CSR is a  $\phi$ 3.0 dot size, 23.0mm×39.10mm 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.

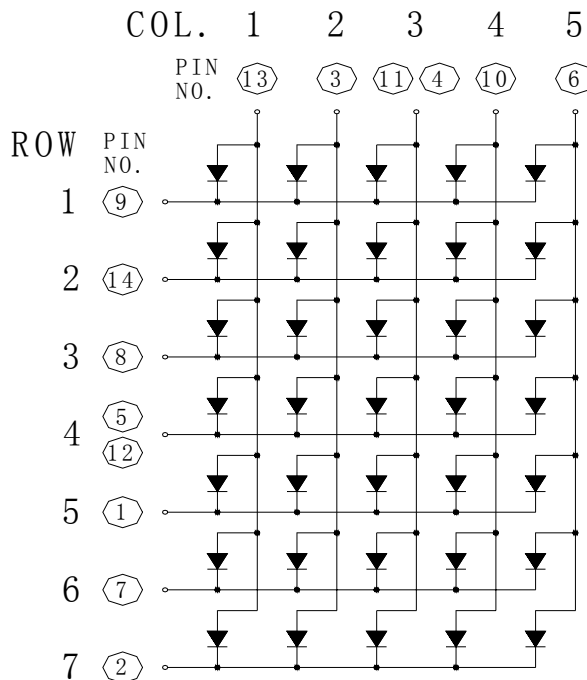
**DEVICE**

PART NO.	EMITTING COLOR	DESCRIPTION
REC-M1057CSR	Super-Red	Row Cathode Black face, White dot

**PACKAGE DIMENSION**



**INTERNAL CIRCUIT DIAGRAM**



**PIN CONNECTION**

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

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

PARAMETER	SYMBOL	MAXIMUM	UNIT
Power Dissipation per dot	P <sub>AD</sub>	60	mW
Peak Forward Current per dot (1/10 duty cycle, 0.1ms pulse width)	I <sub>PF</sub>	80	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	10	13
Peak Emission Wavelength, λ <sub>p</sub> (I <sub>F</sub> =20mA)	nm		640	
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	1.8	1.9	2.0
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