

SPECIFICATION FORM

FEATURES

- ◇ Φ 3.70MM DOT SIZE
- ◇ 37.90MM×37.90MM OUTLINE
- ◇ 8×8 FORMAT
- ◇ SINGLE COLOR DOT MATRIX
- ◇ LOW POWER REQUIREMENT
- ◇ EASY ASSEMBLY
- ◇ SOLID STATE RELIABILITY

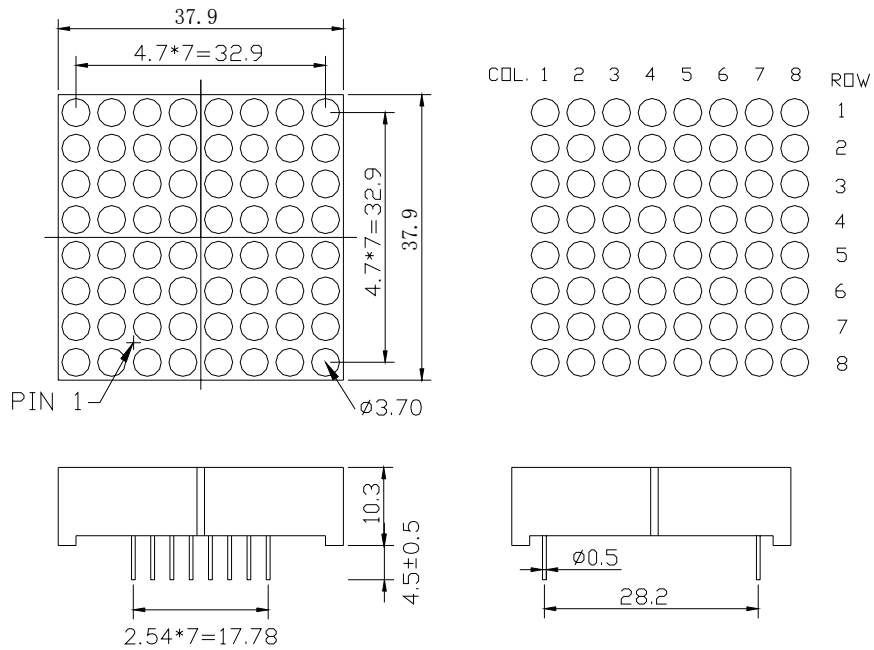
DESCRIPTION

The REC-M1588CSR is a ϕ 3.70 dot size, 37.90mm×37.90mm outline, 8×8 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.

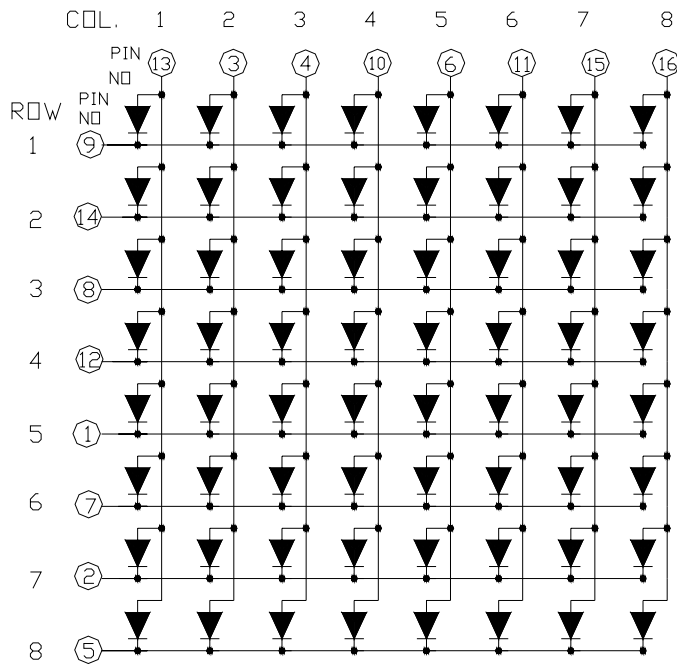
DEVICE

PART NO.	EMITTING COLOR	DESCRIPTION
REC-M1588CSR	Super-Red	Column Cathode, Black face, White dots

PACKAGE DIMENSION



INTERNAL CIRCUIT DIAGRAM



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 (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 $T_A=25^\circ\text{C}$

PARAMETER	UNIT	MIN	TYPE	MAX
Luminous Intensity per dot, I_V ($I_F=20\text{mA}$)	mcd	10	12	15
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	1.60	1.80	2.00
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

Notes:

- (1) All dimensions are in millimeters.
- (2) Tolerance is $\pm 0.25\text{mm}$ unless otherwise noted.