

Dot Matrix Display Data Sheet

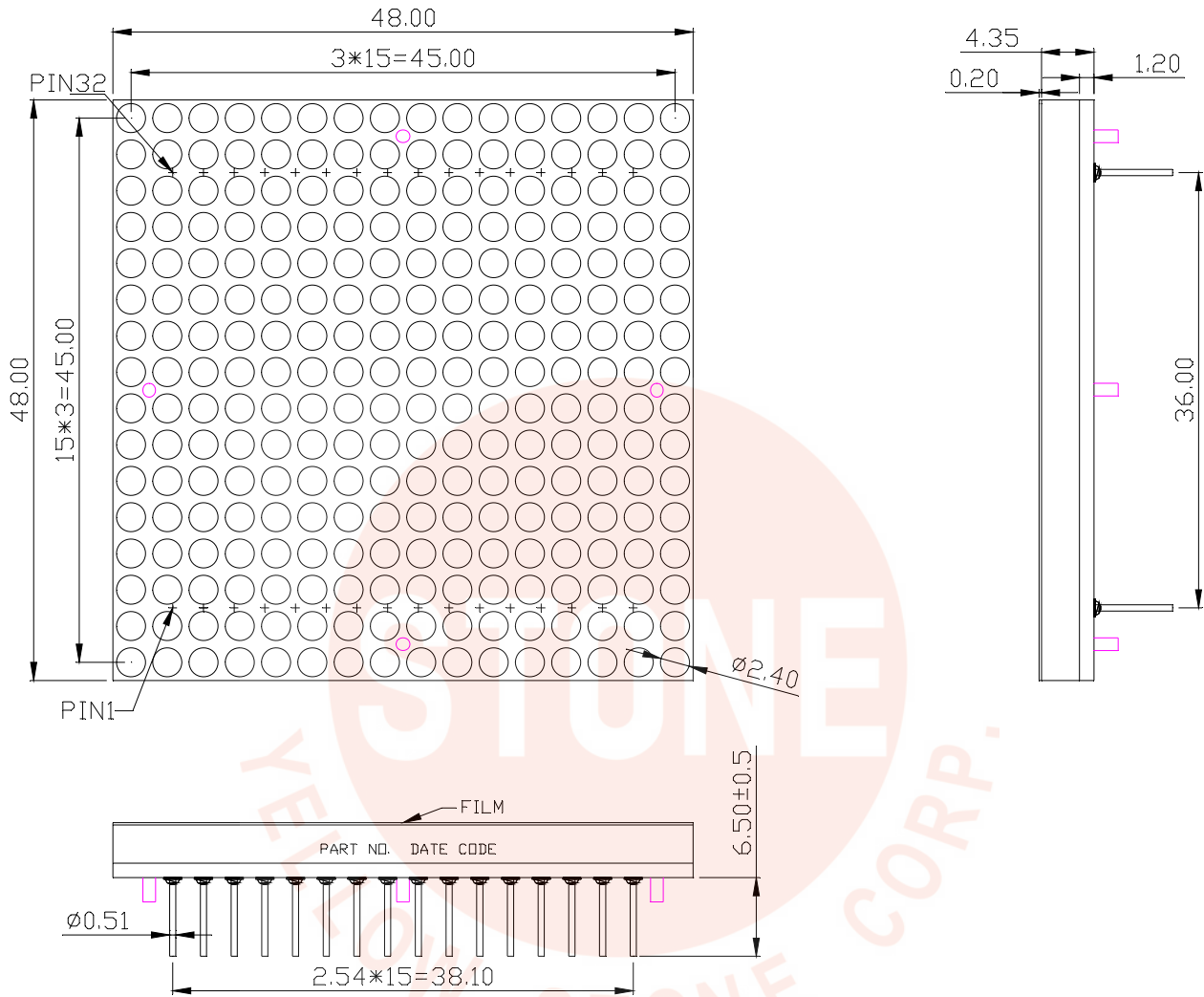
Description

This YDM-0916161AR-N is a 0.09 inch (2.4mm) dot height 16x16 dot Matrix display. This device uses AlInGaP Red LED chips, which are made from AlInGaP on a transparent GaAs substrate, and has a black face and air type with diffuse film.

Features

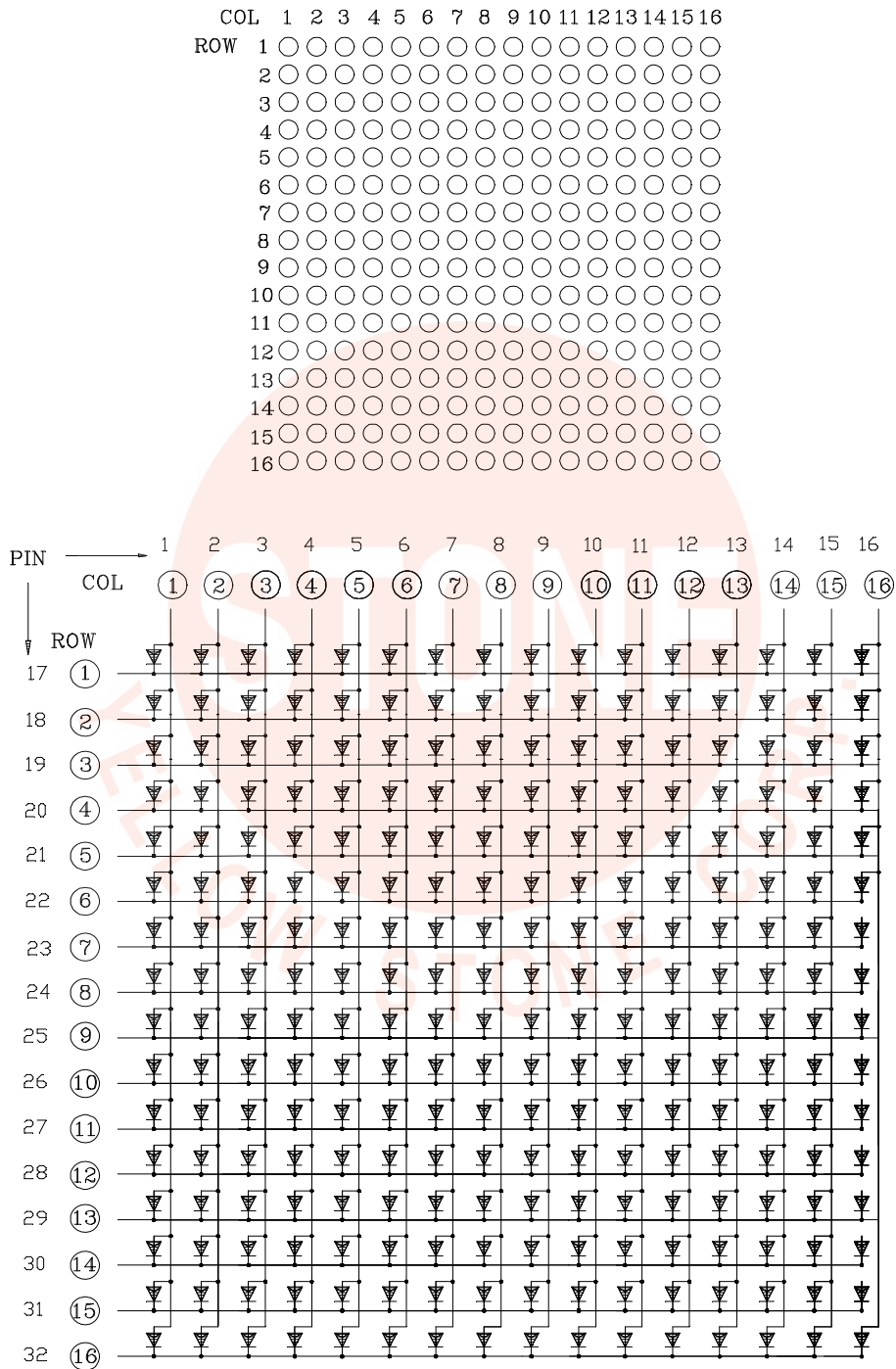
- 0.09 inch (2.4mm) dot height
- 16x16 with x-y select
- Low power requirement
- Excellent characters appearance
- High brightness & high contrast
- Wide viewing angle
- Solid state reliability
- Categorized for luminous intensity

Package Dimensions



All dimensions are in millimeters. Tolerances are ± 0.25 mm (0.01") unless otherwise noted.
 Diffuse film slip out tolerance $+0.5\text{mm}/-0.3\text{mm}$.

Internal Circuit Diagram



Absolute Maximum Rating (Ta = 25°C)

Parameter	Maximum	Unit
Power Dissipation Per Segment	70	mW
Peak Forward Current Per Segment (Frequency 1Khz, 10% duty cycle)	90	mA
Continuous Forward Current Per Segment	25	mA
Reverse Voltage Per Segment	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-40°C to +100°C	
Soldering Conditions:Max 260 ⁰ C for max 3sec at 1.6mm below seating plane.		

This product should be operated in forward bias. If a reverse voltage is continuously applied to the product, such operation can cause migration resulting in LED damage.

Electrical / Optical Characteristics (Ta = 25°C)

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	3.4	8.6		mcd	IF=20mA
Peak Emission Wavelength	λp		650		nm	IF=20mA
Spectral Line Half-Width	Δλ		20		nm	IF=20mA
Dominant Wavelength	λd		639		nm	IF=20mA
Forward Voltage Per Segment	VF		2.1	2.6	V	IF=20mA
Reverse Current Per Segment	IR			10	μA	VR=5V
Luminous Intensity Matching Ratio	Iv-m			2:1		IF=20mA

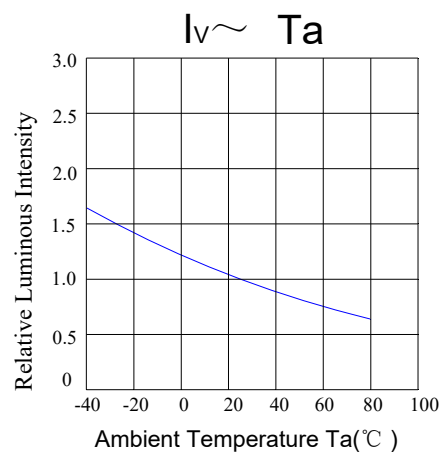
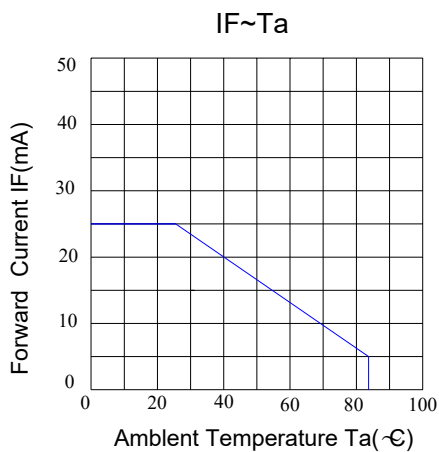
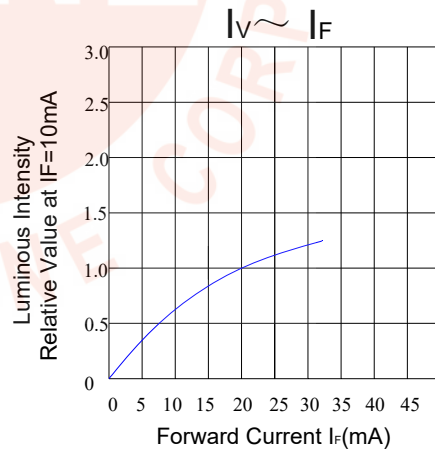
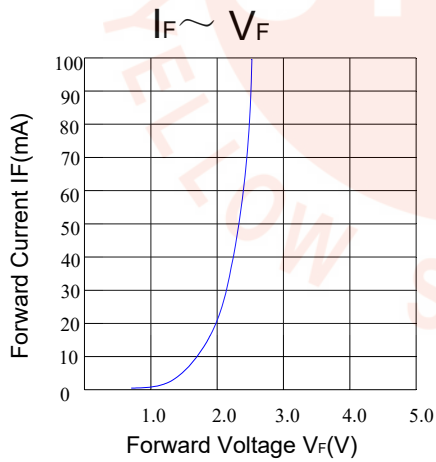
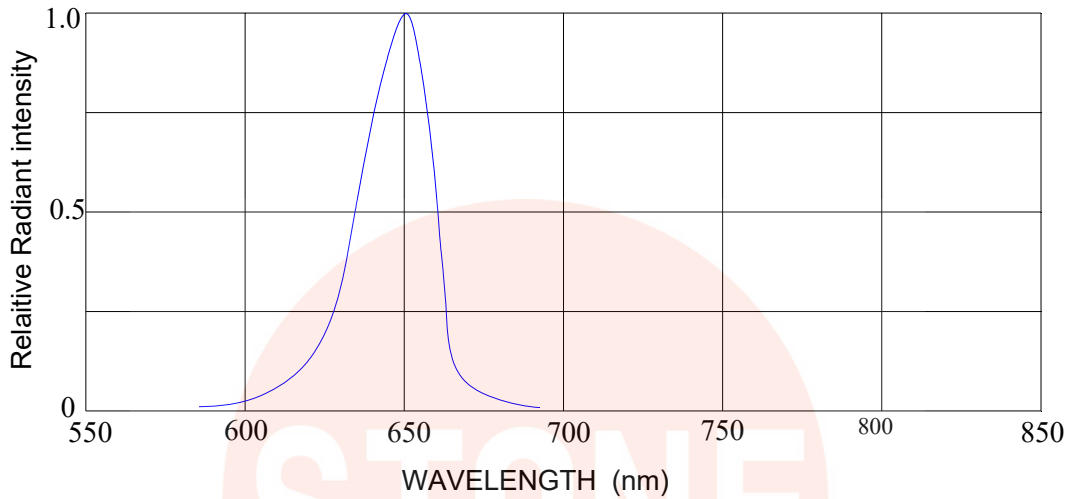
Note:1.Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

2.Wavelength: +/-1nm Luminous Intensity: +/-15% Forward Voltage: +/-0.1V

Typical Electrical / Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)

RELATIVE INTENSITY VS WAVELENGTH





Package Flow

