



Dot Matrix Display Data Sheet

Description

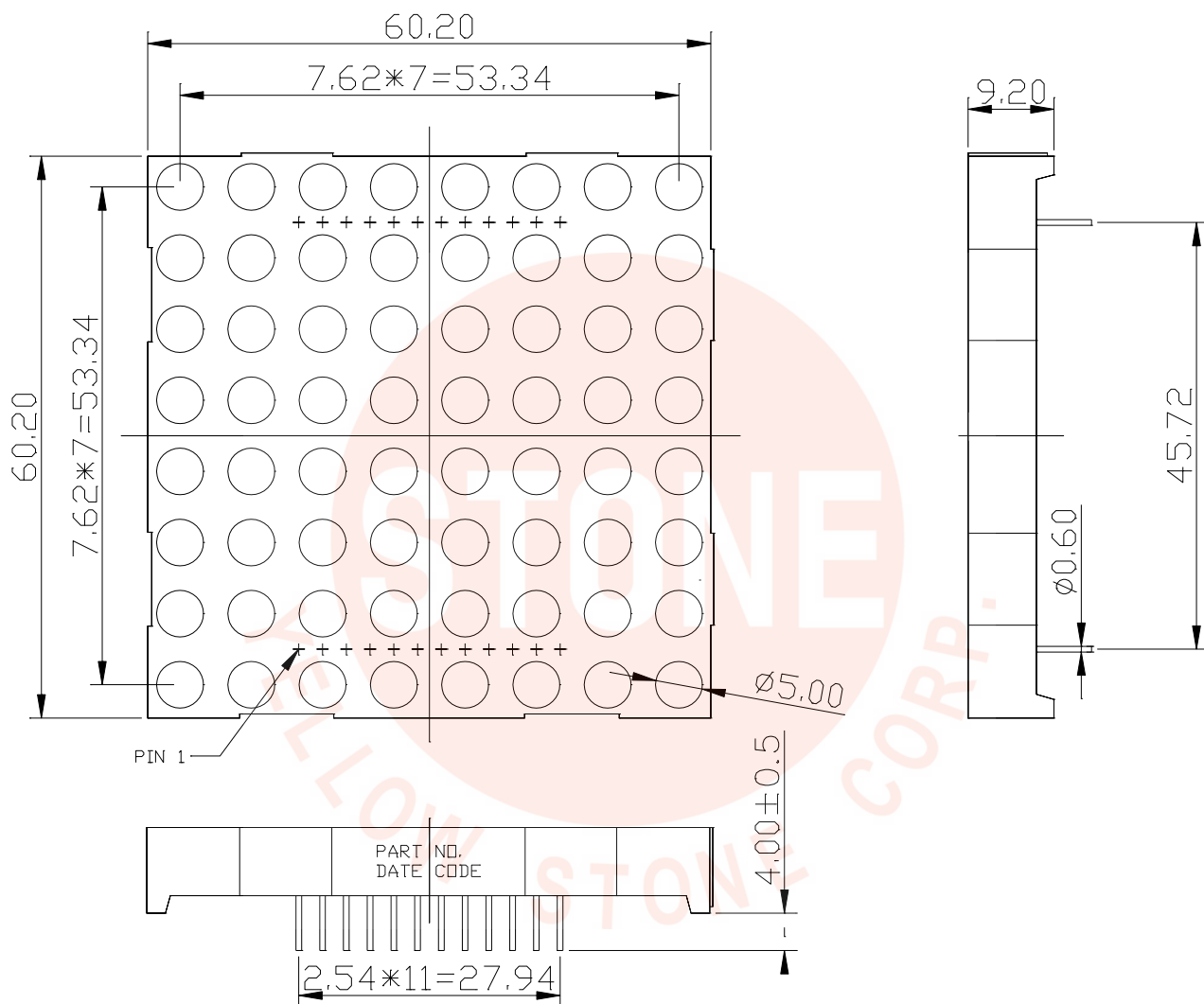
The YDM-20881CM-N is a 0.2 inch (5.08mm) dot height 8X8 dot matrix display.

This device uses pure green and red LED chips,
the green chips are made from InGaN epi on a Sapphire substrate,
the red chips are made from AlInGaP epi on GaAs substrate,
and has a black face and transparent segments.

Features

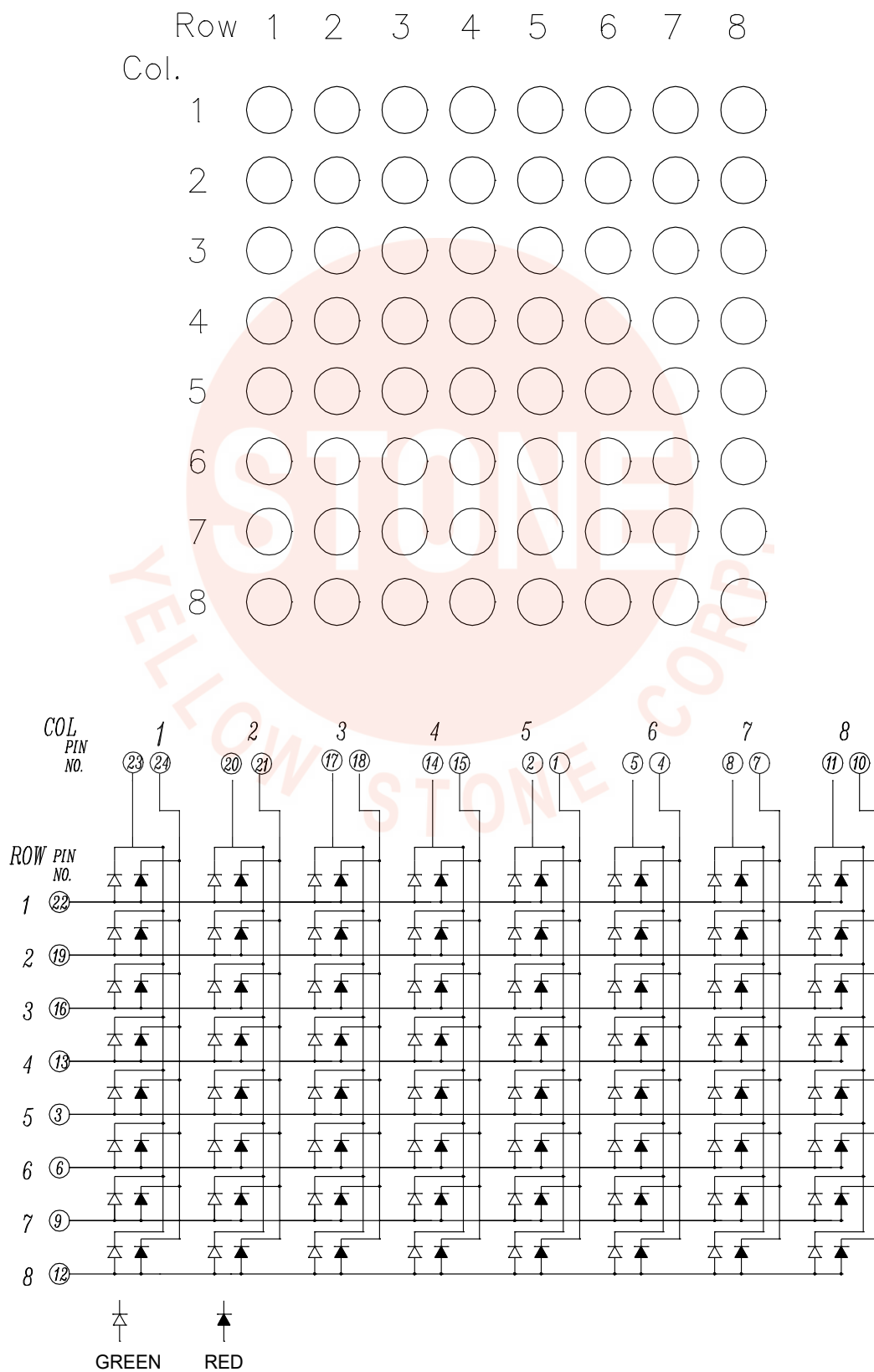
- 0.2-inch (5.08mm) dot height
- 8x8 array with x-y select
- LOW POWER REQUIREMENT
- EXCELLENT CHARACTERS APPEARANCE
- HIGH BRIGHTNESS & HIGH CONTRAST
- WIDE VIEWING ANGLE
- SOLID STATE RELIABILITY
- CATEGORIZED FOR LUMINOUS INTENSITY

Package Dimensions



All dimensions are in millimeters. Tolerances are 0.25 mm (0.01") unless otherwise noted.

Internal Circuit Diagram



Absolute Maximum Rating (Ta = 25°C)

PARAMETER	RED	GREEN	UNIT
Power Dissipation Per Segment	70	120	mW
Peak Forward Current Per Segment (Frequency 1Khz,18% duty cycle)	90	100	mA
Continuous Forward Current Per Segment	25	30	mA
Reverse Voltage Per Segment	5		V
Operating Temperature Range	-35°C to +85°C		
Storage Temperature Range	-35°C to +85°C		
Soldering Conditions: 1/16 inch below seating plane for 3 seconds at 260°C			

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)

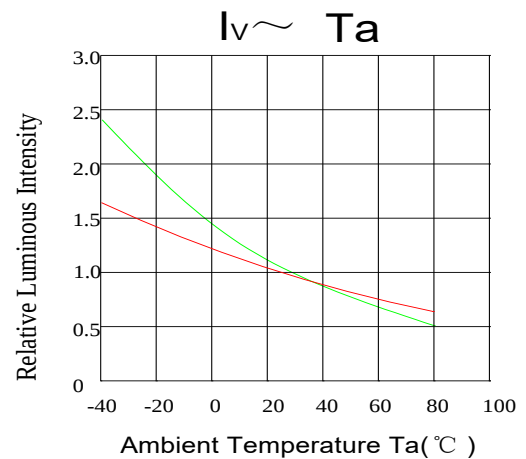
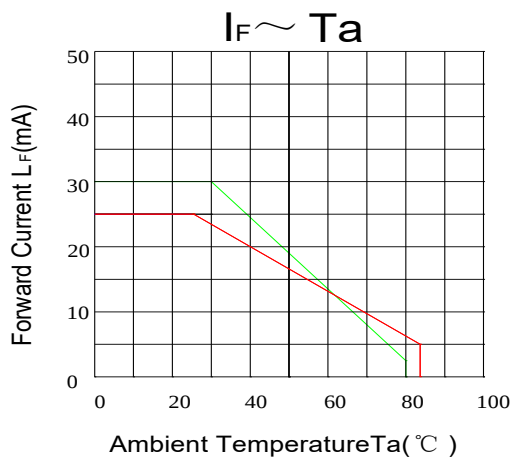
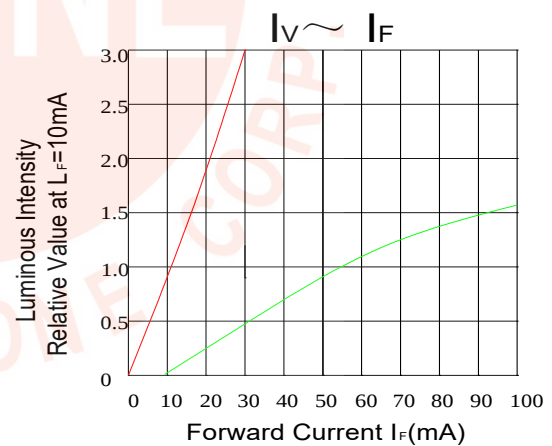
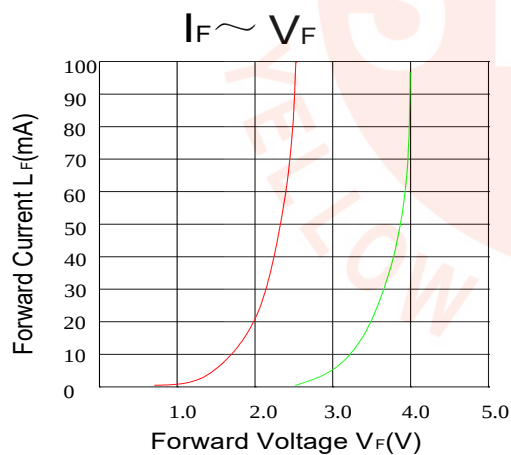
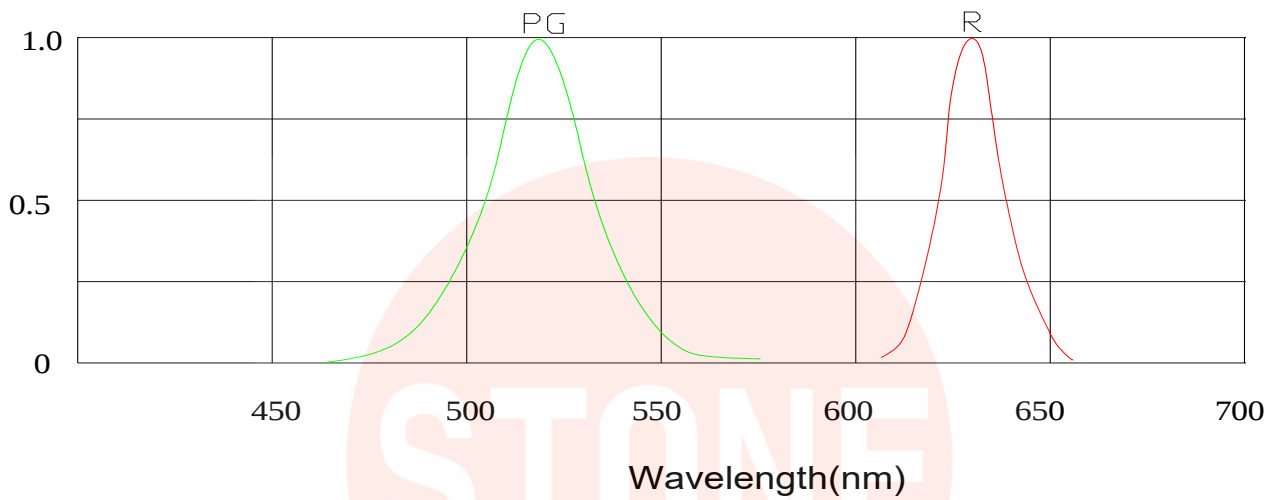
PARAMETER	SYMBOL	COLOR	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	Iv	Red Green	60 150	120 300		mcd	IF=10mA
Peak Emission Wavelength	λ_p	Red Green		632 518		nm	IF=20mA
Spectral Line Half-Width	$\Delta \lambda$	Red Green		20 35		nm	IF=20mA
Dominant Wavelength	λ_d	Red Green		624 525		nm	IF=20mA
Forward Voltage Per Segment	VF	Red Green		2.0 3.0	2.6 3.6	V	IF=20mA
Reverse Current Per Segment	IR	Red Green			10	uA	VR=5V
Luminous Intensity Matching Ratio	Iv-m	Red Green			2:1		IF=10mA

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

Typical Electrical / Optical Characteristic Curves

(25°C Ambient Temperature Unless Otherwise Noted)

RELATIVE INTENSITY vs WAVELENGTH





早安股份有限公司
YELLOW STONE CORP.

Package Flow

