

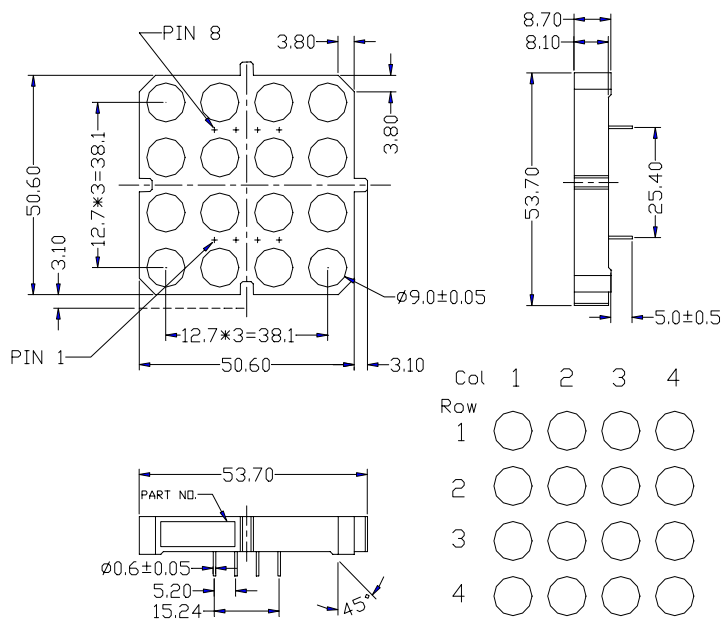
FEATURES

- 2.0inch (50.60mm) Matrix height
- Choice of three colors — Bright Green /Orange / SH. Red
- Flat package and light weight
- Easy assembly
- High quality and low cost
- High reliable and intensity
- Low power requirement

DESCRIPTION :

- 4 x 4 dot matrix displays
- φ 9.0mm dot and pitch 12.7mm
- Black face or gray face and water clear dots

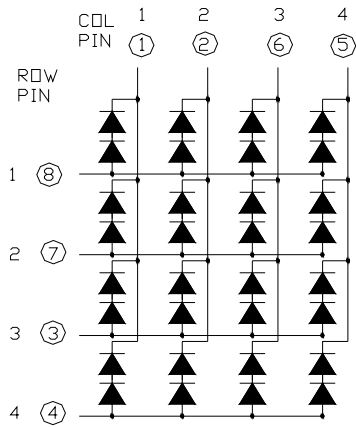
PACKAGE DIMENSIONS



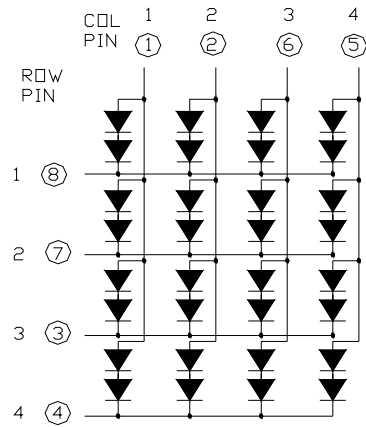
NOTES: All dimensions are in millimeters (inches) tolerance are ± 0.25mm (0.01inch) unless otherwise noted.

CIRCUIT DIAGRAM

A. WCN-4420XX-DA01



B. WCN-4420XX-DC01



ABSOLUTE MAXIMUM RATINGS AT $T_a=25^\circ\text{C}$

PARAMETER	Bright Green	Orange	SH. Red	UNIT
Maximal Power Dissipation (When completely Lighting) Per Dot	52	52	40	mW
Maximal Forward Current (When completely Lighting) Per Dot	10	10	10	mA
Derating Linear From 25°C Per Dot	0.166	0.166	0.166	mA/°C
Peak Forward Current Per Dot	40	40	40	mA
Reverse Voltage Per Dot	5			V
Operation Temperature Range	-35 ~+85			°C
Storage Temperature Range.	-35 ~+85			°C

NOTES: $T_a=25^\circ\text{C}$ $I_{F,P}=1/8$ Duty 10KHZ

OPTOELECTRIC CHARACTERISTICS $T_a=25^\circ\text{C}$

PARAMETER	SYMBOL	TEST CONDITIONS	PART NO.	RATING			UNIT
				MIN.	TYP.	MAX.	
Forward Voltage Per Dot	V_F	$I_F=20\text{mA}$	Bright Green	—	4.5	5.2	V
			Orange	—	4.1	5.2	
			SH. Red	—	3.6	4.0	
Reverse Current Per Dot	I_R	$V_R=5\text{V}$	Bright Green SH. Red, Orange	—	—	100	μA
Luminous Intensity Per Dot	I_V	$I_{F P}=40\text{mA}$ 1/8 Duty	Bright Green	—	5.0	—	mcd
			Orange	—	3.0	—	
			SH. Red	—	8.0	—	
Peak Emission Wavelength Per Dot	λ_P	$I_F=20\text{mA}$	Bright Green	—	568	—	nm
			Orange	—	632	—	
			SH. Red	—	660	—	
Dominant Wavelength Per Dot	λ_D	$I_F=20\text{mA}$	Bright Green	—	573	—	nm
			Orange	—	622	—	
			SH. Red	—	643	—	
Spectral Line Wave Length Per Dot	$\Delta\lambda$	$I_F=20\text{mA}$	Bright Green	—	30	—	nm
			Orange	—	35	—	
			SH. Red	—	20	—	
Luminous Intensity Matching Ratio (Dot To Dot)	lv-m	$I_{F P}=40\text{mA}$ 1/8 Duty	Bright Green SH. Red. Orange			2:1	

SOLDERING CONDITIONS : Soldering Temp. $\leq +260^\circ\text{C}$; Soldering Time $\leq 3\text{sec}$

(at 2mm Distance from the Case of Reflector Edge)