



DM5-8824 SERIES

Ø5.0mm 8 × 8 SINGLE COLOR DOT MATRIX LED DISPLAYS

FEATURES

- 2.4inch (60.2mm) 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 :

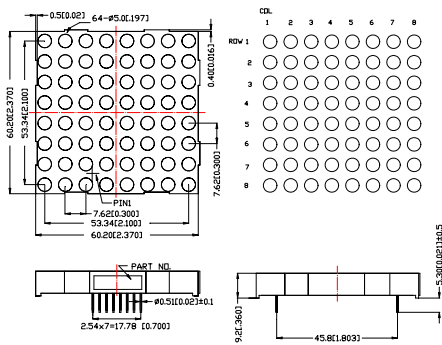
- 8x8 dot matrix displays
- φ 5.0mm dot and pitch 7.62mm
- Black face or gray face and white diffused dots

DEVICES

PART NO.			DESCRIPTION	PACKAG E DIAGRAM	CIRCUIT DIAGRAM
Bright Green	Orange	SH. Red			
DM5-8824GU-DA01	DM5-8824HO-DA01	DM5-8824SR-DA01	Row Anode	A	A
DM5-8824GU-DC01	DM5-8824HO-DC01	DM5-8824SR-DC01	Row Cathode	A	B
DM5-8824GU-DA06	DM5-8824HO-DA06	DM5-8824SR-DA06	Row Anode	B	C
DM5-8824GU-DC06	DM5-8824HO-DC06	DM5-8824SR-DC06	Row Cathode	B	D

PACKAGE DIMENSIONS

A. DM5-8824GU/HO/SR/DA01



PIN CONNECTION

DM5-8824GU/HO/SR-DA01/DC01

PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Row 5	9	Row 1
2	Row 7	10	Column 4
3	Column 2	11	Column 6
4	Column 3	12	Row 4
5	Row 8	13	Column 1
6	Column 5	14	Row 2
7	Row 6	15	Column 7
8	Row 3	16	Column 8

DM5-8824GU/HO/SR-DA06/DC06

PIN NO.	CONNECTION	PIN NO.	CONNECTION
1	Column 1	9	Column 8
2	Column 2	10	Column 7
3	Column 3	11	Column 6
4	Column 4	12	Column 5
5	Row 5	13	Row 4
6	Row 6	14	Row 3
7	Row 7	15	Row 2
8	Row 8	16	Row 1

ABSOLUTE MAXIMUM RATINGS AT T_a=25°C

PARAMETER	Bright Green	Orange	SH. Red	UNIT
Maximal Power Dissipation (When completely Lighting) Per Dot	39	39	30	mW
Maximal Forward Current (When completely Lighting) Per Dot	15	15	15	mA
Derating Linear From 25°C Per Dot	0.166	0.166	0.166	mA/°C
Peak Forward Current Per Dot	80	80	80	mA
Reverse Voltage Per Dot	5			V
Operation Temperature Range	-35 ~+85			°C
Storage Temperature Range.	-35 ~+85			°C

NOTES: T_a=25°C I_{FP}=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	1.8	2.25	2.6	V
			Orange	—	2.1	2.6	
			SH. Red	—	1.8	2.0	
Reverse Current Per Dot	I_R	$V_R=5\text{V}$	Bright Green SH. Red. Orange	—	—	100	μA
Luminous Intensity Per Dot	I_V	$I_{FP}=40\text{mA}$ 1/8 Duty	Bright Green	2.0	3.5	—	mcd
			Orange	1.46	2.5	—	
			SH. Red	3.0	5.0	—	
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)	I_{V-m}	$I_{FP}=40\text{mA}$ 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)