



PM3-FF04DM-CA01

DATA SHEET

COTCO			CUSTOMER
NOTE:			

Primary Edition 07

2002,12,30

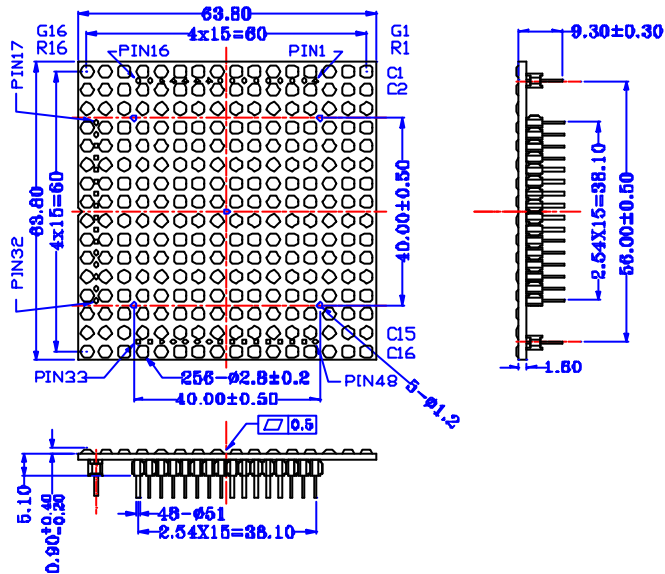
Features:

- High Reliability and Intensity
- Low Power Requirement
- Good radiating capability And Easy Assembly
- Good Heat Dispersion Characteristic
- Expand Visual Angle And Good Consistency

Description:

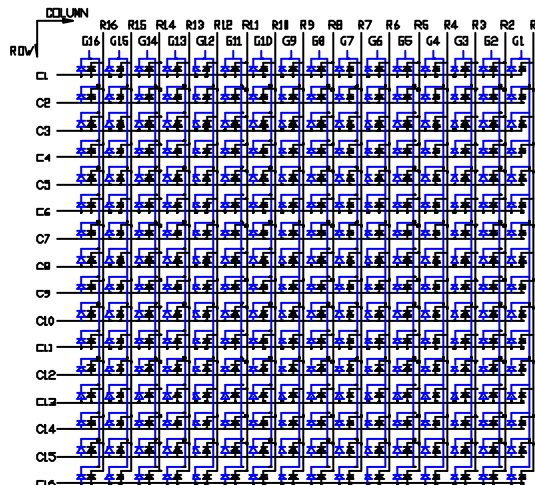
- 16 × 16 Surface Epoxy Encapsulated Dot Matrix
- 2.8mm Dot and Pitch 4.0mm
- Red & Yellow Green Dual Color Dot Matrix (This PCB is all black except DB/WB PAD)

Outer Dimension



Note: Unless otherwise stated, The tolerance is $\pm 0.25\text{mm}$.

Circuit Diagram



PIN NO.	ADDRESS	PIN NO.	ADDRESS
1	R1	48	G1
2	R2	47	G2
3	R3	46	G3
4	R4	45	G4
5	R5	44	G5
6	R6	43	G6
7	R7	42	G7
8	R8	41	G8
9	R9	40	G9
10	R10	39	G10
11	R11	38	G11
12	R12	37	G12
13	R13	36	G13
14	R14	35	G14
15	R15	34	G15
16	R16	33	G16
17	C1	32	C16
18	C2	31	C15
19	C3	30	C14
20	C4	29	C13
21	C5	28	C12
22	C6	27	C11
23	C7	26	C10
24	C8	25	C9

EXPENSE:
 1. THE BUILT -> PREPARED FOR RED COLOR SHEET
 2. THE BUILT -> PREPARED FOR GREEN COLOR SHEET



COTCO INTERNATIONAL LTD

■ Absolute Maximum Rating (Ta=25):

Parameter	Symbol	Condition	Color	Rating	Units
Power Dissipation Per Dot	P _d		Yellow Green	24	mW
			Red	23	
Forward Current Per Dot	I _F		Yellow Green	10	mA
			Red	10	
Derating Of I _F Per Dot	I _F	Ta 25	Yellow Green	0.0833	mA/
			Red	0.0833	
Peak Forward Current Per Dot	I _{FP}	1/8Duty 1khz	Yellow Green	80	mA
			Red	80	
Reverse Voltage Per Dot	V _R		Yellow Green	5	V
			Red	5	
Operating Temperature Range	Topr			-10 +70	
Storage Temperature Range	Tstg			-10 +70	

Electrical/Optical Characteristics Rating(Ta=25)

Item	Symbol	Test conditions	Location	Color	Rating			Units
					Min.	Typ.	Max.	
Forward Voltage	V _F	I _F =20mA	Per Dot	Yellow Green	—	2.05	2.40	V
				Red	—	1.95	2.30	
Reverse Current	I _R	V _R =5V	Per Dot	Yellow Green	—	—	100	μ A
				Red	—	—	100	
Luminance	I _V	I _{FP} =80mA 1/16 Duty	Per Module	Yellow Green	—	230	—	cd/m ²
				Red	—	270	—	
				R+G	—	500	—	
Emission Wave Length	d	I _F =20mA	Per Dot	Yellow Green	—	572	—	nm
				Red	—	630	—	
Spectral Line Half Width		I _F =20mA	Per Dot	Yellow Green	—	20	—	nm
				Red	—	20	—	
Luminous Intensity Matching Ratio	I _{v-m}	I _{FP} =80mA 1/16 Duty					1:1.5	

Hue Grade : (I_{bc}=20mA ;The Tolerance is +/- 1)

B IN	A	B
COLOR		
Red (nm)	628~630.5	630.6~633

Hue Grade : (I_{dc}=20mA ;The Tolerance is +/- 1)

B IN	1	2	3
COLOR			
Yellow Green (nm)	569~571.0	571.1~573.0	573.1~575.0

Soldering Conditions : Soldering Temp. +260
Soldering Time. 3sec.

(At 2mm Distance from The Case of Pin Socket Edge)