



1.90" (47.80mm) Φ 4.80mm 8*8 Single Color Dot Matrix Displays

Features:

- *Ultra dot intensity
- *Wide viewing angle
- *Range of colors
- *Gray face White dot
- *RoHS compliant

Available option:

- *Alternative face and dot color
- *Cropped terminal pins
- *Available emitting color
- *Low current version

Electro/Optical Characteristics If=20mA Ta=25°C

Part Number Common Cathode	Part Number Common Anode	Emitting Color	Peak Wavelength	Forward Voltage Vf/Dot		Luminous Intensity Iv/Dot	
				Typ.	Max.	Min.	Typ.
NFM-19881EUHR-21	NFM-19881FUHR-21	AlGaInP/GaAs Ultra Red	640	2.00	2.50	40.00	60.00
NFM-19881EUE-21	NFM-19881FUE-21	AlGaInP/GaAs Ultra Orange	632	2.00	2.50	40.00	60.00
NFM-19881EYO-21	NFM-19881FYO-21	AlGaInP/GaAs Ultra Amber	605	2.00	2.50	40.00	60.00
NFM-19881EUY-21	NFM-19881FUY-21	AlGaInP/GaAs Ultra Yellow	590	2.00	2.50	40.00	60.00
NFM-19881EUG-21	NFM-19881FUG-21	AlGaInP/GaAs Ultra Green	574	2.10	2.50	25.00	40.00
NFM-19881EPG-21	NFM-19881FPG-21	InGaN/SiC Pure Green	525	3.30	3.80	150.00	200.00
NFM-19881EUB-21	NFM-19881FUB-21	InGaN/SiC Ultra Blue	470	3.30	3.80	40.00	100.00
NFM-19881EUW-21	NFM-19881FUW-21	InGaN/SiC Ultra White	X-0.31/Y-0.31	3.30	3.80	200.00	500.00
Units			nm	V		mcd	

Maximum Ratings Ta=25°C (Derate above 25°C)

Characteristic	Test Condition	Symbol	UHR	UE	YO	UY	UG	PG	UB	UW	Units
Pulse Forward Current Per Dot	1/10 duty cycle 0.1ms Pulse width	I _{FP}	100	100	100	100	100	100	100	100	mA
DC Forward Current Per Dot		I _F	30	30	30	30	30	30	30	30	mA
Reverse Current Per Dot	V _R =5V	I _R	10	10	10	10	10	10	10	10	μA
Power Dissipation		P _D	65*64	65*64	65*64	65*64	75*64	110*64	120*64	120*64	mW
Operating Temperature		T _{OPR}	-40 to +80								°C
Storage Temperature		T _{TSG}	-40 to +85								°C
Lead soldering temperature	1.60mm from body maximum 3 seconds		260								°C

Checked

Chen N.H.

Approved

Jason Chen

Date

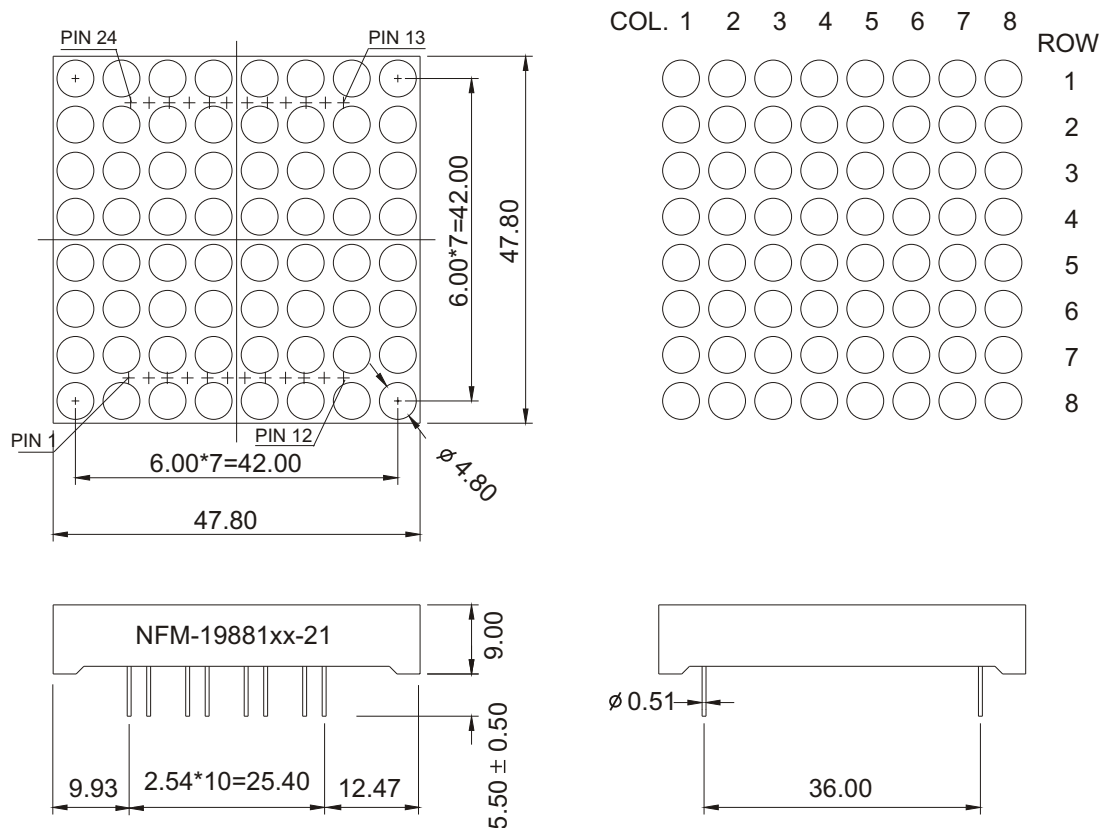
Dec/13/2019

PAGE 1 / 2



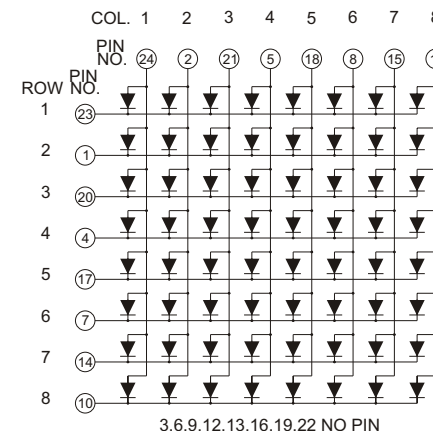
1.90" (47.80mm) Φ 4.80mm 8*8 Single Color Dot Matrix Displays

PACKAGE DIMENSION

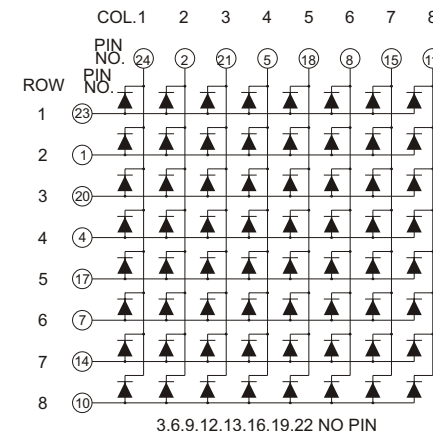


INTERNAL CIRCUIT DIAGRAM

Row Cathode
Column Anode
NFM-19881Ex



Row Anode
Column Cathode
NFM-19881Fx



Tolerance ± 0.25 mm unless stated