■ Features:

- 32.00mm (1.2") F 3.0 dot matrix LED display.
- Low current operation.
- Excellent character apperance.
- Easy mounting on P.C.boards or sockets.
- I.C.compatible.

■ Part No.:

Common Cathode	Iv TYP.(mcd)	Common Anode	Iv TYP.(mcd)
FYM-12881ASG-XX	768	FYM-12881BSG-XX	768
FYM-12881AEG-XX	640	FYM-12881BEG-XX	640
FYM-12881AURUG-XX	1536	FYM-12881BURUG-XX	1536
FYM-12881AUEPG-XX	1536	FYM-12881BUEPG-XX	1536

■ Description:

- Color Code & Chip characteristics: (Test Condition: IF=20mA)

Emitting Color		Dice Material	Peak Wave Length (λ_P)	Spectral Line halfwidth ($\triangle\lambda$ 1/2)	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:ucd
					Typ	Max	
S	Hi Red	GaAlAs/GaAs,SH	660nm	20nm	1.85	2.20	3500
E	Orange	GaAsP	635nm	35nm	2.10	2.50	2500
G	Green	GaP	570nm	30nm	2.20	2.50	2500
UR	Ultra Red	AlGaAs,DDH	660nm	20nm	1.95	2.20	7000
UE	Ultra Orange	AlGaInP	630nm	20nm	2.10	2.50	7000
UG	Ultra Green	AlGaInP	574nm	30nm	2.20	2.50	5000
PG	Ultra Pure Green	AlGaInP	525nm	36nm	3.80	4.50	5000

- -XX: Surface / Lens color：

Number	0	1	2	3	4	5
Ref Surface Color	White	Black	Gray	Red	Green	
Epoxy Color	Water clear	White diffused	Red Diffused	Green Diffused	Yellow Diffused	

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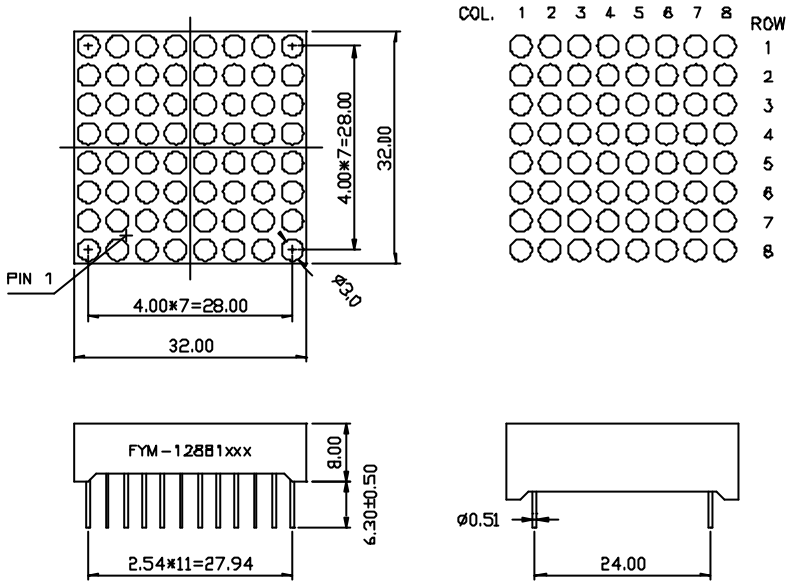
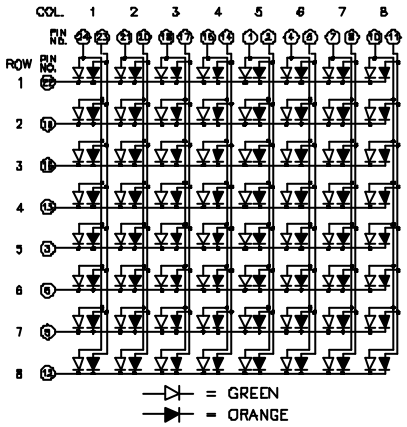
■ Package configuration & Internal circuit diagram:

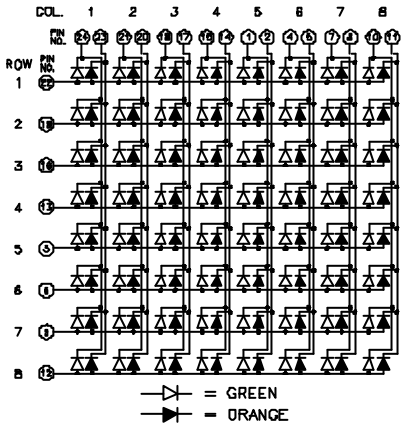
FYM-12881 Series



FYM-12881Axx



FYM-12881Bxx



Notes:

- All dimensions are in millimeters (inches)
- Tolerance is ±0.25(0.01")unless otherwise noted.
- Specificaions are subject to change whitout notice.

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■ Electrical-optical characteristics: (Ta=25℃)

Parameter	Symbol	AlGaAs	GaAsP	GaP(Green)	AlGaInP	InGaN	Unit
Power Dissipation	P_{ad}	60	80	80	75	120	mW
Peak Forward Current *	I_{pf}	150	150	150	150	100	mA
Continuous Forward Current	I_{af}	25	30	30	30	30	mA

Notes:
・* Test Condition = Duty 0.1,10KHZ

■ Absolute maximum ratings (Ta=25℃)

Reverse Voltage	5V
Reverse Current	20μA
Operating Temperature Range	-40℃to+85℃
Storage Temperature Range	-40℃to+85℃
Lead Solder Temperature (1.6mm(1/16")from body) 230℃ for 5 Seconds	

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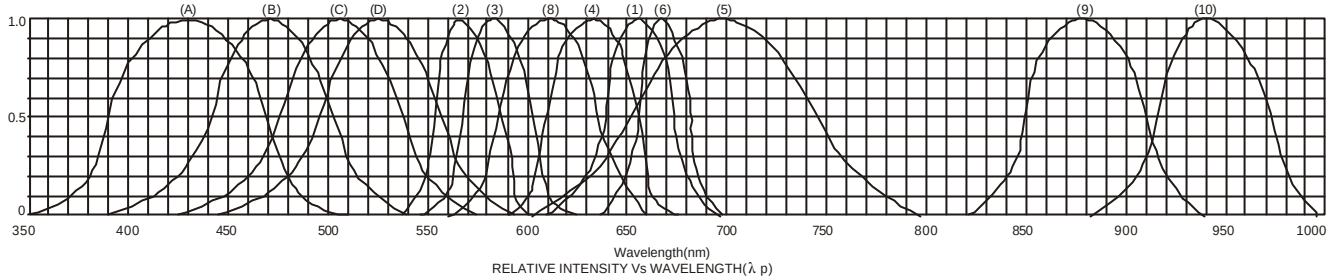
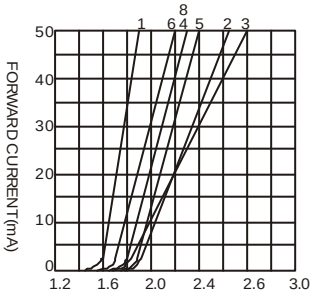
■ Typical electrical-optical characteristics curves:

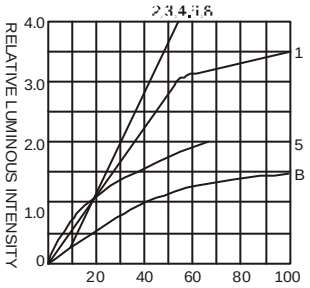


RELATIVE INTENSITY Vs WAVELENGTH(λ p)

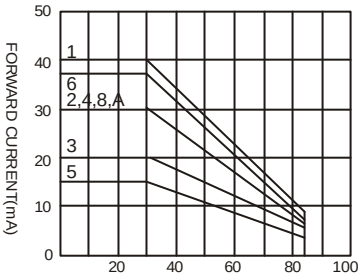
(1) - GaAsP/GaAs 655nm/Red
(2) - GaP 570nm/Yellow Green
(3) - GaAsP/GaP 585nm/Yellow
(4) - GaAsp/GaP 635nm/Orange & Hi-Eff Red
(5) - GaP 700nm/Bright Red
(6) - GaAlAs/GaAs 660nm/Super Red
(8) - GaAsP/GaP 610nm/Super Red
(9) - GaAlAs 880nm
(10) - GaAs/GaAs & GaAlAs/GaAs 940nm
(A) - GaN/SiC 430nm/Blue
(B) - InGaN/SiC 470nm/Blue
(C) - InGaN/SiC 505nm/Ultra Green
(D) - InGaAl/SiC 525nm/Ultra Green



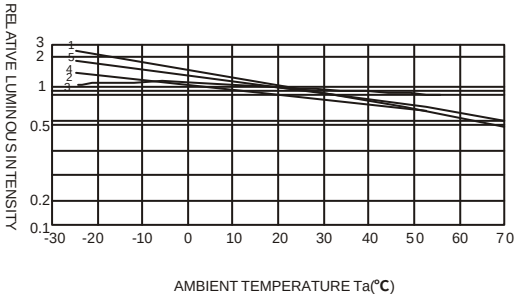
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



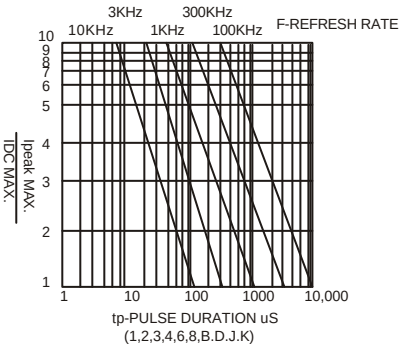
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



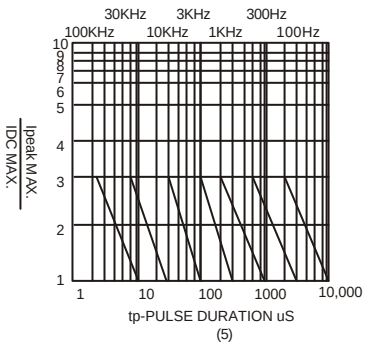
AMBIENT TEMPERATURE Ta(℃)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(℃)



tp-PULSE DURATION uS
(1,2,3,4,6,8,B.D.J.K)



tp-PULSE DURATION uS
(5)

NOTE:25℃ free air temperature unless otherwise specified

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