LED DOT MATRIX

BL-M12X883XX

Features:

- Ø 31.70mm (1.2") 3.0x3.0 SQUARE dot matrix LED display.BI-COLOR
- Ø Low current operation.
- Ø Excellent character appearance.
- Ø Easy mounting on P.C. Boards or sockets.
- Ø I.C. Compatible.
- Ø ROHS Compliance.





Electrical-optical characteristics: (Ta=25 ϑ (Test Condition: IF=20mA)

Part No		Chip			VF Unit:V		Iv
Row Cathode Column Anode	Row Anode Column Cathode	Emitted Color	Material	?p 7 (nm)	Typ	Max	TYP.(mcd)
BL-M12A883SG-XX	BL-M12B883SG-XX	Super Red	AlGaInP	660	2.10	2.50	200
		Green	GaP/GaP	570	2.20	2.50	195
BL-M12A883EG-XX	BL-M12B883EG-XX	Orange	GaAsP/GaP	635	2.10	2.50	190
		Green	GaP/GaP	570	2.20	2.50	195
BL-M12A883DUG-XX	BL-M12B883DUG-XX	Ultra Red	AlGaInP	660	2.10	2.50	320
		Ultra Green	AlGaInP	574	2.20	2.50	250
BL-M12A883UEUG-XX	BL-M12B883UEUG-XX	Ultra Orange	AlGaInP	630	2.10	2.50	235
		Ultra Green	AlGaInP	574	2.20	2.50	250

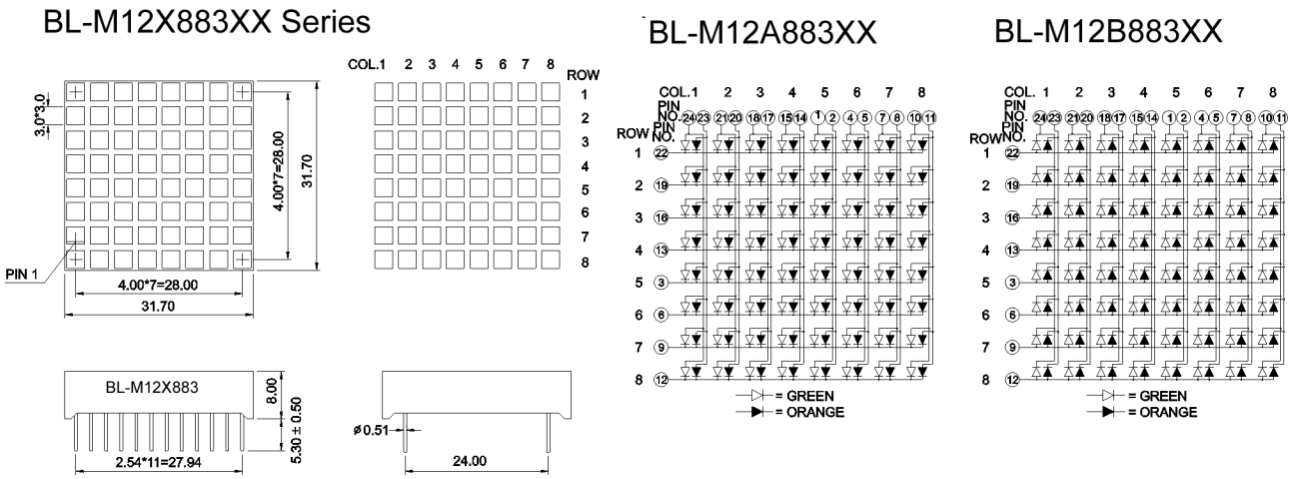
-XX: Surface / Lens color：

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	

Absolute maximum ratings (Ta=25°C)

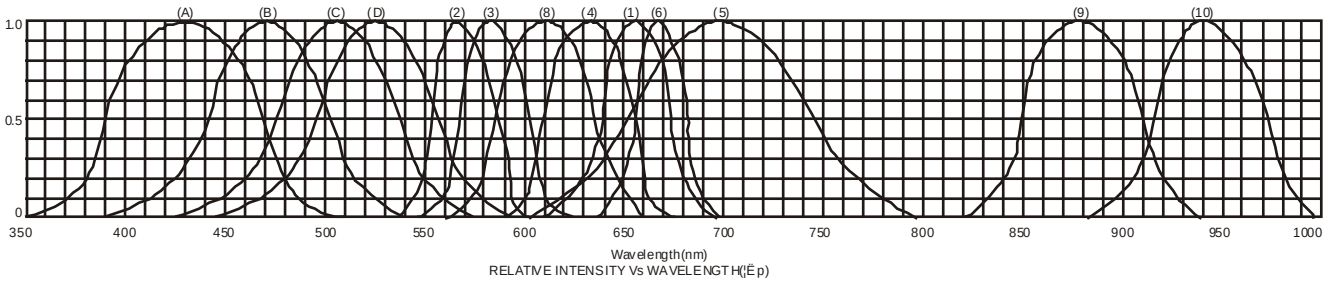
Parameter	S	G	E	D	UG	UE			Unit
Forward Current I_F	30	30	30	30	30	30			mA
Power Dissipation P_d	75	80	80	75	75	65			mW
Reverse Voltage V_R	5	5	5	5	5	5			V
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	150			mA
Operation Temperature T_{OPR}	-40 to +80								C
Storage Temperature T_{STG}	-40 to +85								C
Lead Soldering Temperature T_{SOL}	Max.260±5 Cfor 3 sec Max. (1.6mm from the base of the epoxy bulb)								C

Package configuration & Internal circuit diagram



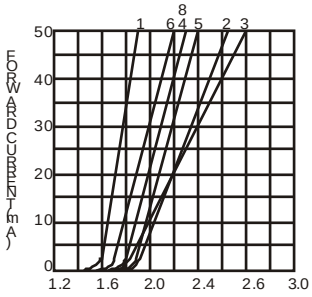
Notes:
1. All dimensions are in millimeters (inches)
2. Tolerance is ±0.25(0.01")unless otherwise noted.
3. Specifications are subject to change without notice.

Typical electrical-optical characteristics curves:

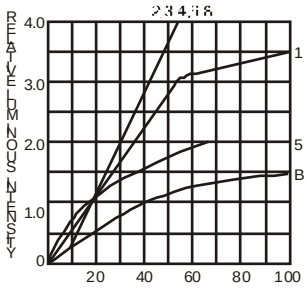


RELATIVE INTENSITY Vs WAVELENGTH(λp)

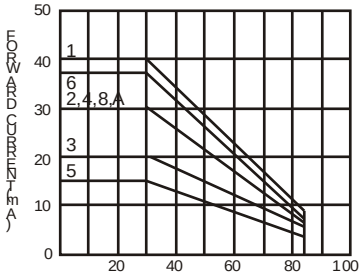
(1) - GaAsP/GaAs 655nm/Red
(2) - GaP 570nm/Yellow Green
(3) - GaAsP/GaP 585nm/Yellow
(4) - GaAsp/GaP 635nm/Orange & Hi-Eff Red
(5) - GaP 700nm/Bright Red
(6) - GaAlAs/GaAs 660nm/Super Red
(8) - GaAsP/GaP 610nm/Super Red
(9) - GaAlAs 880nm
(10) - GaAs/GaAs & GaAlAs/GaAs 940nm
(A) - GaN/SiC 430nm/Blue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



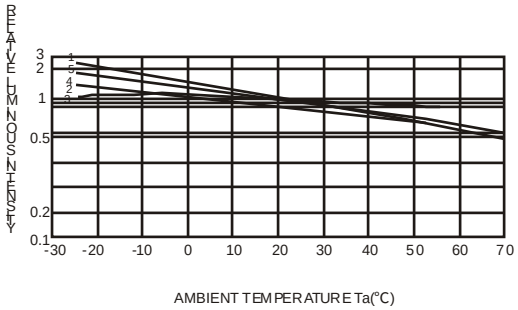
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



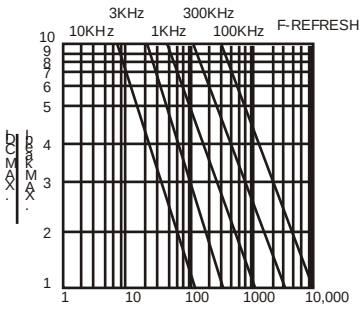
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



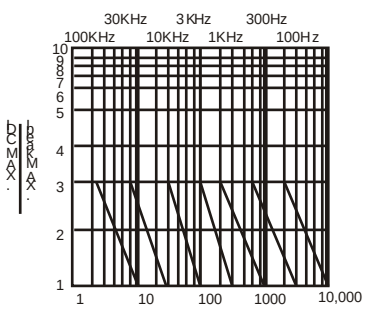
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



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



tp-PULSE DURATION uS
(5)

NOTE:25°C free air temperature unless otherwise specified

Packing and weighting

