

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 °C) (Test Condition: IF=20mA)

Part No		Chip			VF Unit:V		Iv TYP.(mcd)
Row Cathode Column Anode	Row Anode Column Cathode	Emitted Color	Material	λ_p (nm)	Typ	Max	
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)

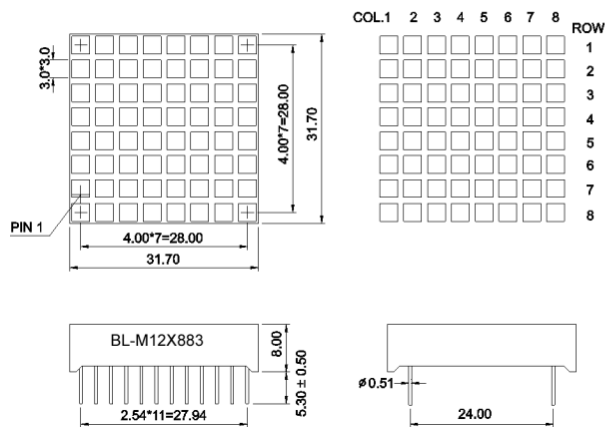
Parameter	S	G	E	D	UG	UE		Unit
Forward Current I_F	30	30	30	30	30	30		mA
Power Dissipation P_d	75	80	80	75	75	65		mW
Reverse Voltage V_R	5	5	5	5	5	5		V
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	150	150	150	150	150	150		mA
Operation Temperature T_{OPR}	-40 to +80							°C
Storage Temperature T_{STG}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

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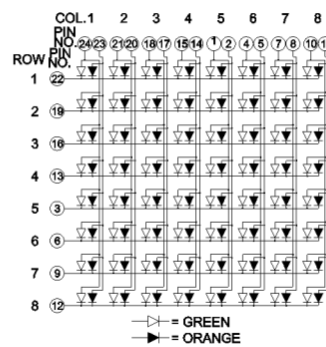
BL-M12X883XX

Package configuration & Internal circuit diagram

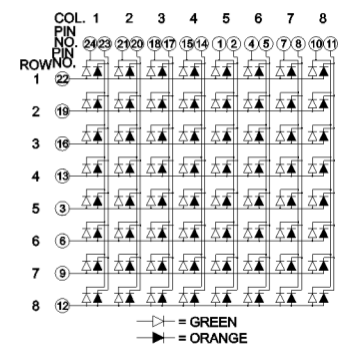
BL-M12X883XX Series



BL-M12A883XX



BL-M12B883XX



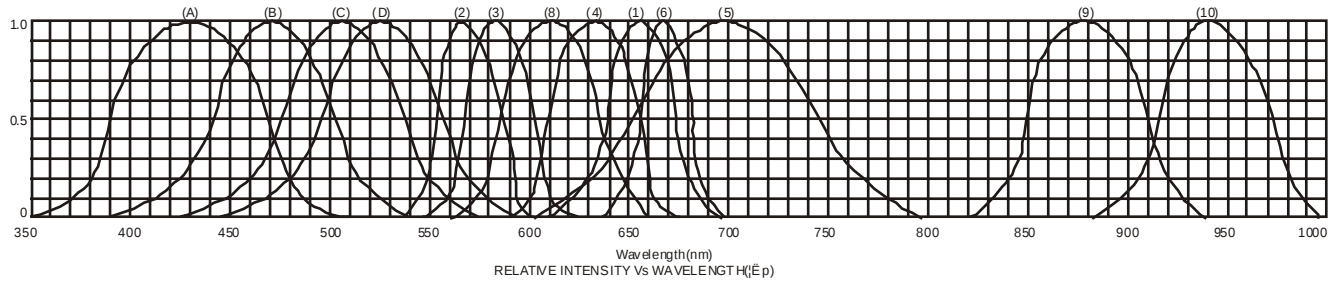
Notes:

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.

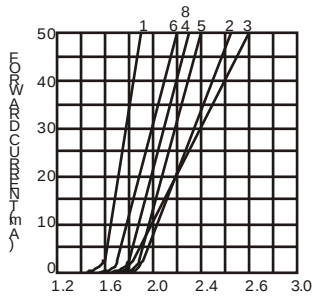
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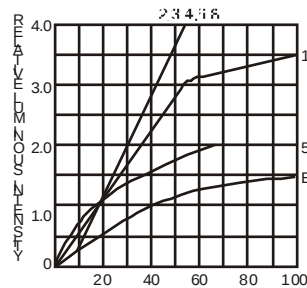
Typical electrical-optical characteristics curves:



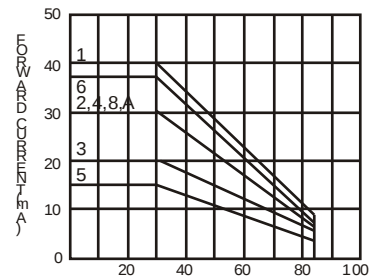
- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue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



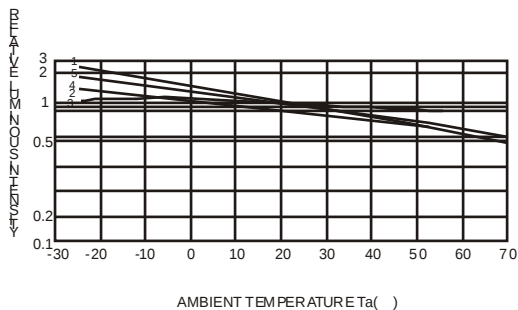
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



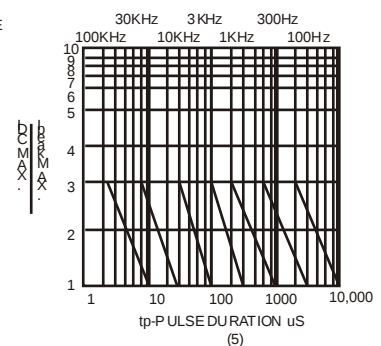
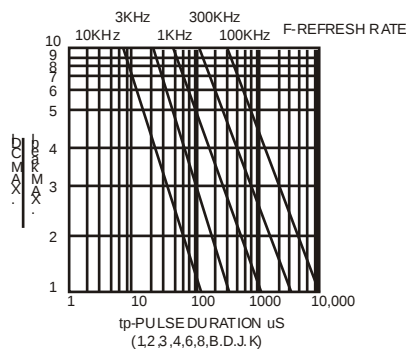
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



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



AMBIENT TEMPERATURE Ta(°C)



NOTE: 25 °C free air temperature unless otherwise specified

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Packing and weighting

