# BL-M12X883XX

# Thetlux

#### Features:

- 31.70mm (1.2") 3.0x3.0 SQUARE dot matrix LED display.BI-CQLOR
- 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** Q (Test Condition: IF=20mA)

Part No			VF Unit:V					
Row Cathode Column Anode	Row Anode Column Cathode	Emitted Color	Material	% 7 (nm)	Тур	Max	lv 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/Ga P	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-X	BL-M12B883UEUG-X	Ultra Orange	AlGaInP	630	2.10	2.50	235	
Х	Х	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	
<b>Epoxy Color</b>	Water	White	Red	Green	Yellow	
	clear	diffused	Diffused	Diffused	Diffused	

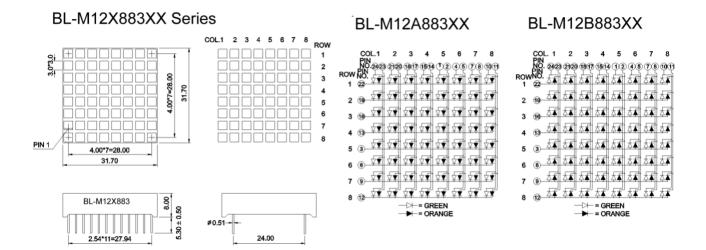
Absolute maximum ratings (Ta=25°C)

Absolute maximum ratings (1a=25 o)								
Parameter	S	G	E	D	UG	UE		U nit
Forward Current I <sub>F</sub>	30	30	30	30	30	30		mA
Power Dissipation P <sub>d</sub>	75	80	80	75	75	65		mW
Reverse Voltage V <sub>R</sub>	5	5	5	5	5	5		V
Peak Forward Current I <sub>PF</sub> (Duty 1/10 @1KHZ)	150	150	150	150	150	150		mA
Operation Temperature T <sub>OPR</sub>	-40 to +80					,	С	
Storage Temperature T <sub>STG</sub>	-40 to +85						С	
Lead Soldering Temperature $T_{SOL}$ Max.260±5 Cfor 3 sec Max.  (1.6mm from the base of the epoxy bulb)						С		

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### Package configuration & Internal circuit diagram



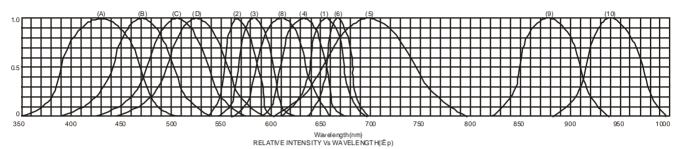
#### Notes:

- All dimensions are in millimeters (inches)
- Tolerance is  $\pm 0.25(0.01")$  unless otherwise noted.
- Specifications are subject to change without notice.

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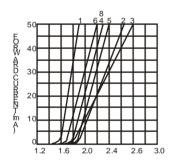


#### Typical electrical-optical characteristics curves:

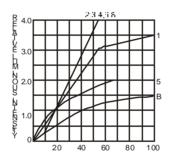


- (1) Ga As P/Ga As 655nm/Red
- (2) GaP 570nm/Yellow Green
- (3) Ga As P/Ga P 585nm/Yellow
- (4) GaAsp/GaP 635nm/Orange & Hi-Eff Red
- (5) GaP 700nm/Bright Red
- (6) Ga AlAs/GaAs 660nm/Super Red
- (8) GaAsP/GaP610nm/Super Red

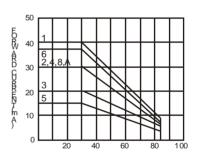
- (9) GaAlAs 880nm
- (10) GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) GaN/SiC 430nm/Blue
- (B) InGaN/SiC 470nm/Blue
- (C) InGaN/SiC 505nm/Ultra Green
- (D) InGaAl/SiC 525nm/Ultra Green



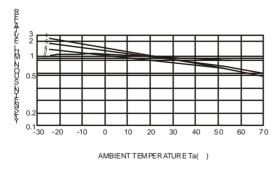
FORWARD VOLTAGE (Vf) FORWARD CURRENT VS. FORWARD VOLTAGE

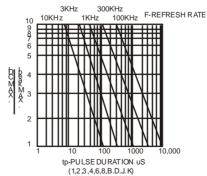


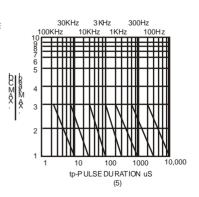
FORWARD CURRENT (mA) RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT



AMBIENT TEMPERATURE Ta( ) FORWARD CURRENT VS. AMBIENT TEMPERATURE







NOTE:25 free air temperature unless otherwise specified

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## Packing and weighting

