

## LED BARGRAPH DISPLAY

BL-AR12B3010xx

### Features:

- Ø 12 bars, 30.4\*10.1\*8.0mm, LED light bar, BI-COLOR TYPE
- Ø Ultra brightness available
- 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		Iv TYP.(mcd)
	Emitted Color	Material	λ <sub>P</sub> (nm)	Unit:V		
				Typ	Max	
BL-AR12Z3010SG--XX	Super Red	AlGaInP	660	2.10	2.50	10
	Green	GaP/GaP	570	2.20	2.50	10
BL-AR12Z3010EG-XX	Orange	GaAsP/GaP	635	2.10	2.50	10
	Green	GaP/GaP	570	2.20	2.50	10
BL-AR12Z3010DUG-XX	Ultra Red	AlGaInP	660	2.10	2.50	30
	Ultra Green	AlGaInP	574	2.20	2.50	18
BL-AR12Z3010UEUG-XX	Ultra Orange	AlGaInP	630	2.10	2.50	18
	Ultra Green	AlGaInP	574	2.20	2.50	18

--XX: Ref Surface / Epoxy 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)

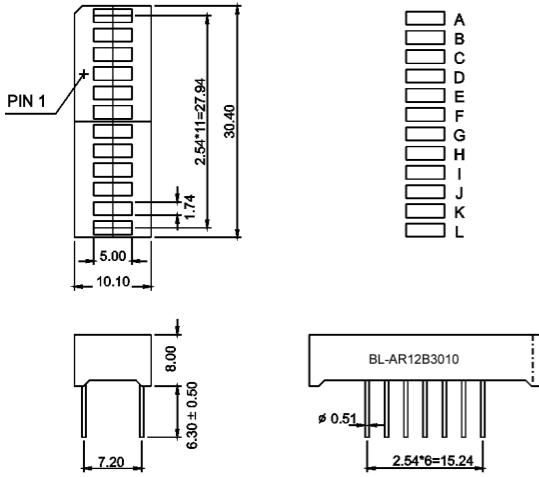
Parameter	S	G	E	D	UG	UE		Unit
Forward Current I <sub>F</sub>	30	30	30	30	30	30		mA
Power Dissipation P <sub>d</sub>	75	80	80	75	75	65		mW
Reverse Voltage V <sub>R</sub>	5	5	5	5	5	5		V
Peak Forward Current I <sub>PF</sub> (Duty 1/10 @1KHZ)	150	150	150	150	150	150		mA
Operation Temperature T <sub>OPR</sub>	-40 to +80							°C
Storage Temperature T <sub>STG</sub>	-40 to +85							°C
Lead Soldering Temperature T <sub>SOL</sub>	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)							°C

# LED BARGRAPH DISPLAY

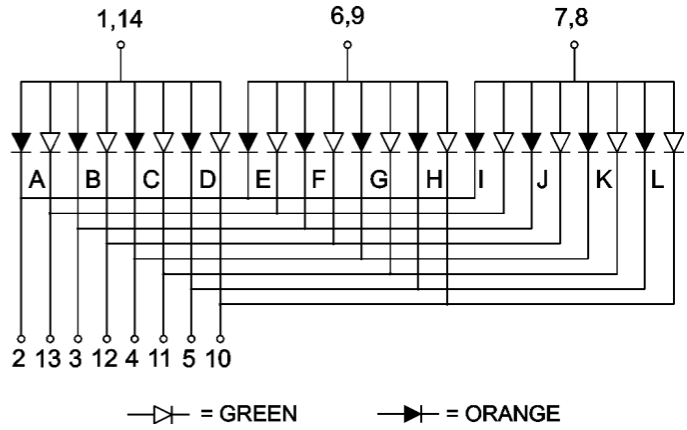
BL-AR12B3010xx

## Package & Circuit

### BL-AR12Z3010 Series



### BL-AR12B3010



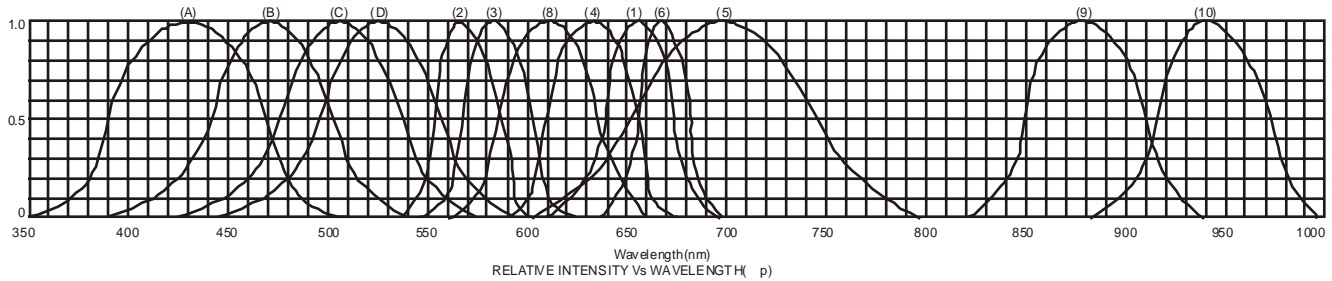
### Notes:

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

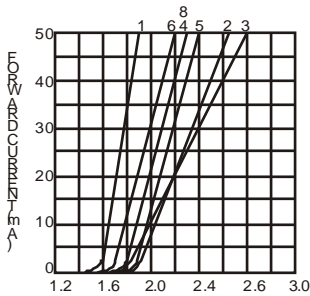
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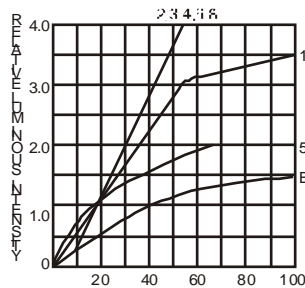
## Typical electrical-optical characteristics curves:



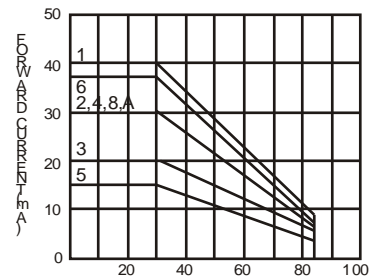
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



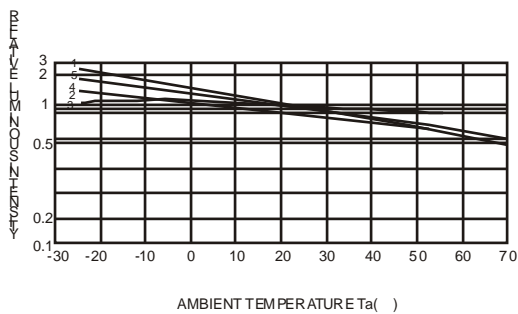
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



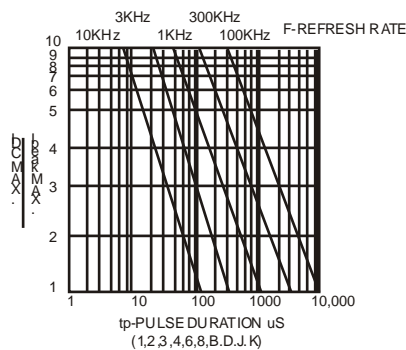
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



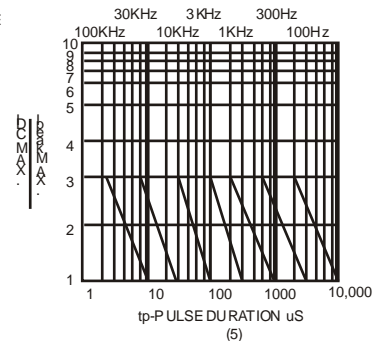
AMBIENT TEMPERATURE Ta ( °C )  
FORWARD CURRENT VS. AMBIENT  
TEMPERATURE



AMBIENT TEMPERATURE Ta ( °C )



tp-PULSE DURATION  $\mu$ s  
(1,2,3,4,6,8,B,D,J,K)



(5)

NOTE: 25 free air temperature unless otherwise specified

**LED BARGRAPH DISPLAY**

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**Packing and weighting**

