

## LED BARGRAPH DISPLAY

BL-AR10B2510xx

### Features:

- Ø 10 bars, 25.4\*10.1\*6.8mm, 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-AR10B2510SG--XX  | Super Red     | AlGaInP   | 660                 | 2.10   | 2.50 | 10           |
|                     | Green         | GaP/GaP   | 570                 | 2.20   | 2.50 | 10           |
| BL-AR10B2510EG-XX   | Orange        | GaAsP/GaP | 635                 | 2.10   | 2.50 | 10           |
|                     | Green         | GaP/GaP   | 570                 | 2.20   | 2.50 | 10           |
| BL-AR10B2510DUG-XX  | Ultra Red     | AlGaInP   | 660                 | 2.10   | 2.50 | 30           |
|                     | Ultra Green   | AlGaInP   | 574                 | 2.20   | 2.50 | 18           |
| BL-AR10B2510UEUG-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)

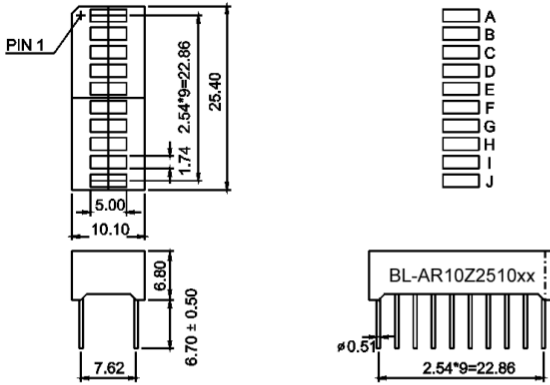
| Parameter   | S   | G   | E   | D   | UG  | UE  |  | Unit |
|---|---|-----|-----|-----|-----|-----|--|------|
| Forward Current I <sub>F</sub>                            | 30  | 30  | 30  | 30  | 30  | 30  |  | mA   |
| Power Dissipation P <sub>d</sub>                          | 75  | 80  | 80  | 75  | 75  | 65  |  | mW   |
| Reverse Voltage V <sub>R</sub>                            | 5   | 5   | 5   | 5   | 5   | 5   |  | V    |
| Peak Forward Current I <sub>PF</sub><br>(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<br>T <sub>SOL</sub>            | Max.260±5°C for 3 sec Max.<br>(1.6mm from the base of the epoxy bulb) |     |     |     |     |     |  | °C   |

# LED BARGRAPH DISPLAY

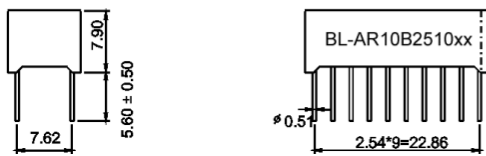
BL-AR10B2510xx

## Package & Circuit

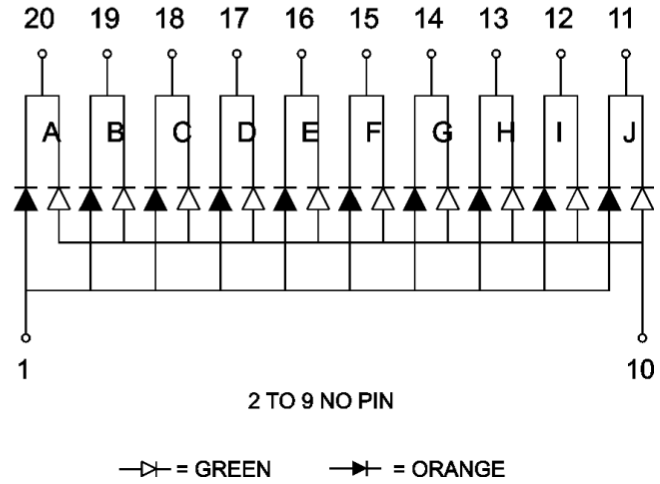
### BL-AR10Z2510 Series



### BL-AR10B2510 Series



### BL-AR10Z2510xx



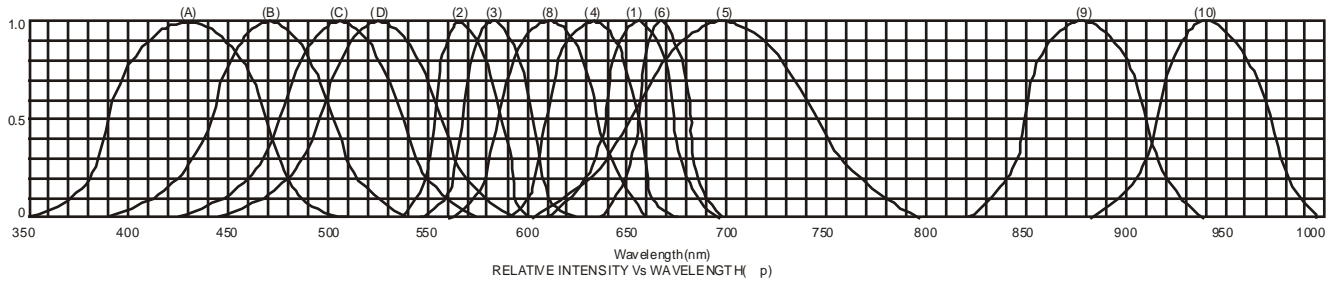
### Notes:

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

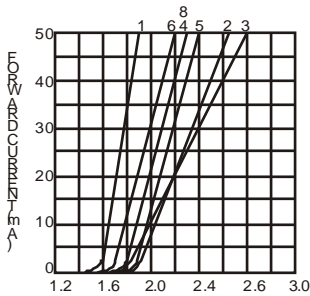
# LED BARGRAPH DISPLAY

BL-AR10B2510xx

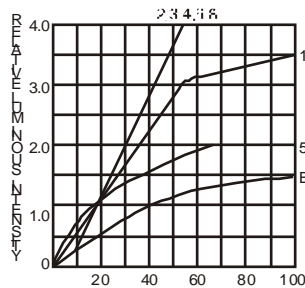
## Typical electrical-optical characteristics curves:



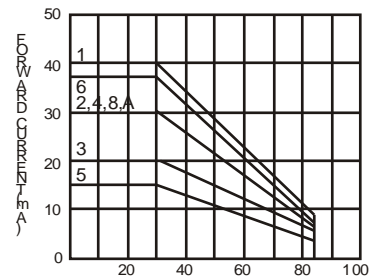
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



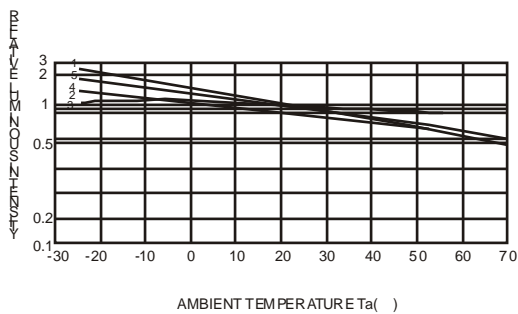
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



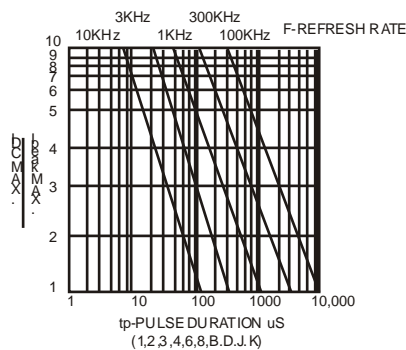
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



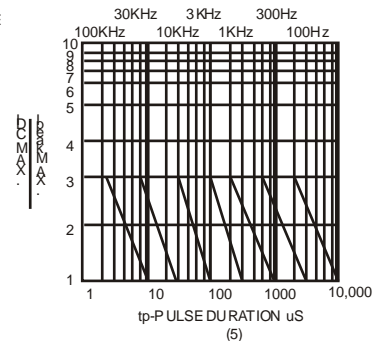
AMBIENT TEMPERATURE Ta ( °C )  
FORWARD CURRENT VS. AMBIENT  
TEMPERATURE



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

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## Packing and weighting

