

LED BARGRAPH DISPLAY
BL-AR10Z2510
■ Features:

- 10 bars, 25.4*10.1*6.8mm, LED light bar
- Ultra brightness available
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C. Boards or sockets.
- I.C. Compatible.


■ Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=20mA)

| Part No | Chip | | | VF | | Iv TYP.(mcd) |
|--------------------|------------------|-----------------|------------------|--------|------|--------------|
| | Emitted Color | Material | λ_p (nm) | Unit:V | | |
| | | | | Typ | Max | |
| BL-AR10Z2510S--XX | Hi Red | GaAlAs/GaAs,SH | 660 | 1.85 | 2.20 | 18 |
| BL-AR10Z2510D-XX | Super Red | GaAlAs/GaAs,DH | 660 | 1.85 | 2.20 | 30 |
| BL-AR10Z2510UR-XX | Ultra Red | GaAlAs/GaAs,DDH | 660 | 1.85 | 2.20 | 45 |
| BL-AR10Z2510E-XX | Orange | GaAsP/GaP | 635 | 2.10 | 2.50 | 10 |
| BL-AR10Z2510Y-XX | Yellow | GaAsP/GaP | 585 | 2.10 | 2.50 | 10 |
| BL-AR10Z2510G-XX | Green | GaP/GaP | 570 | 2.20 | 2.50 | 10 |
| BL-AR10Z2510UHR-XX | Ultra Red | AlGaInP | 645 | 2.10 | 2.50 | 45 |
| BL-AR10Z2510UE-XX | Ultra Orange | AlGaInP | 630 | 2.10 | 2.50 | 18 |
| BL-AR10Z2510YO-XX | Ultra Amber | AlGaInP | 619 | 2.10 | 2.50 | 18 |
| BL-AR10Z2510UY-XX | Ultra Yellow | AlGaInP | 590 | 2.10 | 2.50 | 18 |
| BL-AR10Z2510UG-XX | Ultra Green | AlGaInP | 574 | 2.20 | 2.50 | 18 |
| BL-AR10Z2510PG-XX | Ultra Pure Green | InGaN | 525 | 3.80 | 4.50 | 22 |
| BL-AR10Z2510UB-XX | Ultra Blue | InGaN | 470 | 2.70 | 4.20 | 31 |
| BL-AR10Z2510UW-XX | Ultra White | InGaN | / | 2.70 | 4.20 | 50 |

--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 | |

LED BARGRAPH DISPLAY
BL-AR10Z2510
■ Absolute maximum ratings (Ta=25°C)

| Parameter | S | D | UR | E | Y | G | Unit |
|--|---|-----|-----|-----|-----|-----|------|
| Forward Current I_F | 25 | 25 | 25 | 25 | 25 | 30 | mA |
| Power Dissipation P_d | 60 | 60 | 60 | 60 | 60 | 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 |

■ Absolute maximum ratings (Ta=25°C)

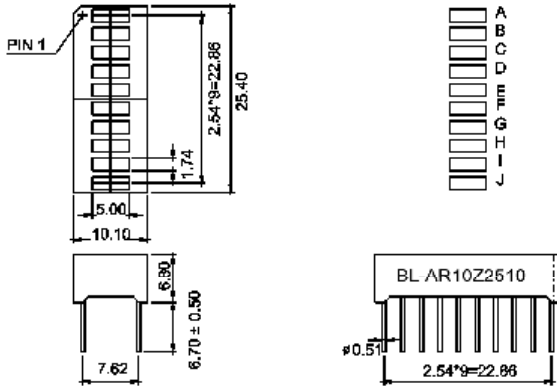
| Parameter | UHR | UE | YO | UY | UG | PG | UB | UW | Unit |
|--|---|-----|-----|-----|-----|-----|-----|-----|------|
| Forward Current I_F | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | mA |
| Power Dissipation P_d | 75 | 65 | 65 | 65 | 75 | 110 | 120 | 120 | mW |
| Reverse Voltage V_R | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | V |
| Peak Forward Current I_{PF} (Duty 1/10 @1KHZ) | 150 | 150 | 150 | 150 | 150 | 150 | 100 | 100 | 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 |

LED BARGRAPH DISPLAY

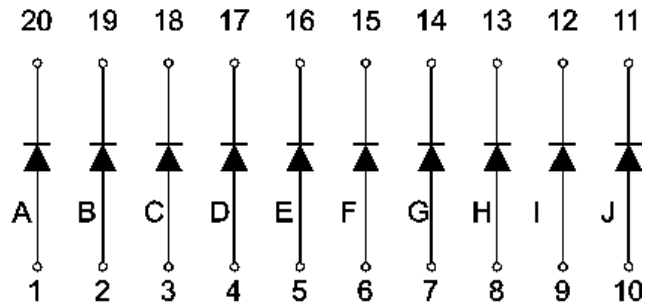
BL-AR10Z2510

■ Package & Circuit

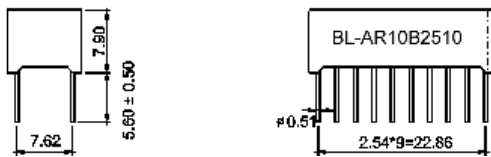
BL-AR10Z2510 Series



BL-AR10Z2510



BL-AR10B2510 Series



Notes:

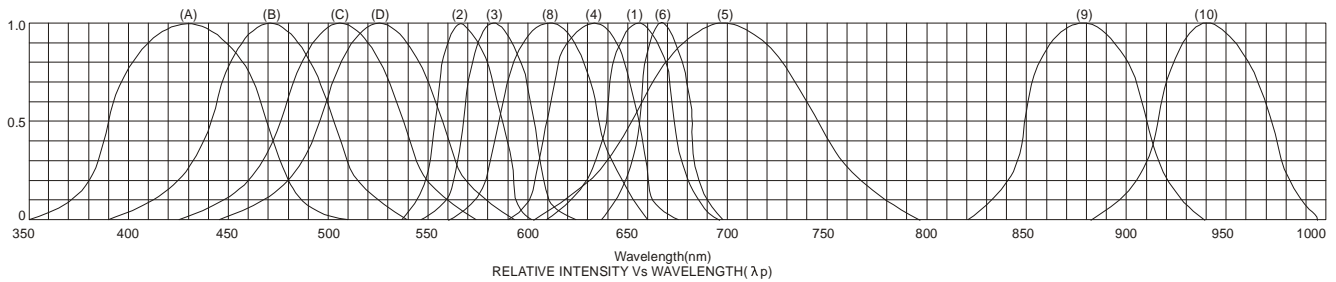
- All dimensions are in millimeters (inches)
- Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
- Specifications are subject to change without notice.

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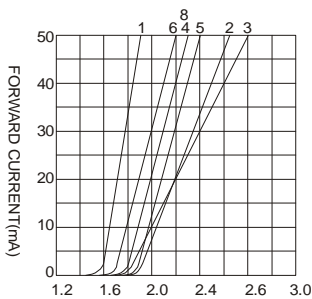
LED BARGRAPH DISPLAY

BL-AR10Z2510

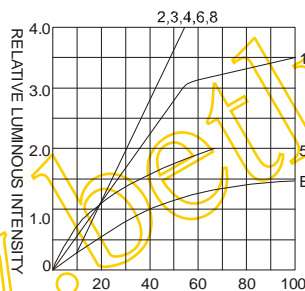
Typical electrical-optical characteristics curves:



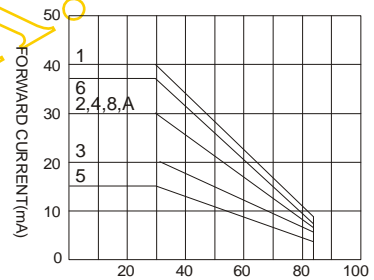
- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue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



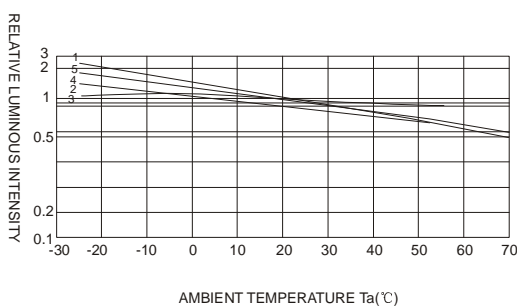
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



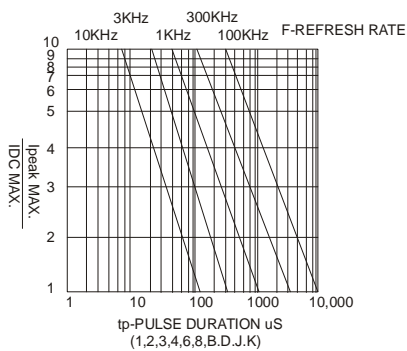
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



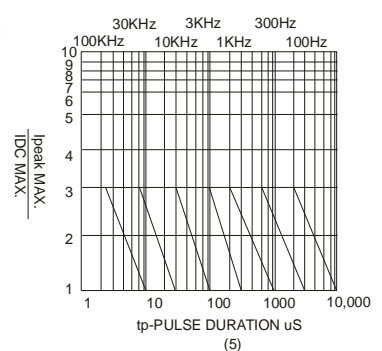
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



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



tp-PULSE DURATION μs
(5)

NOTE:25°C free air temperature unless otherwise specified