

P/N: DD-12HWB

BRIGHT RED

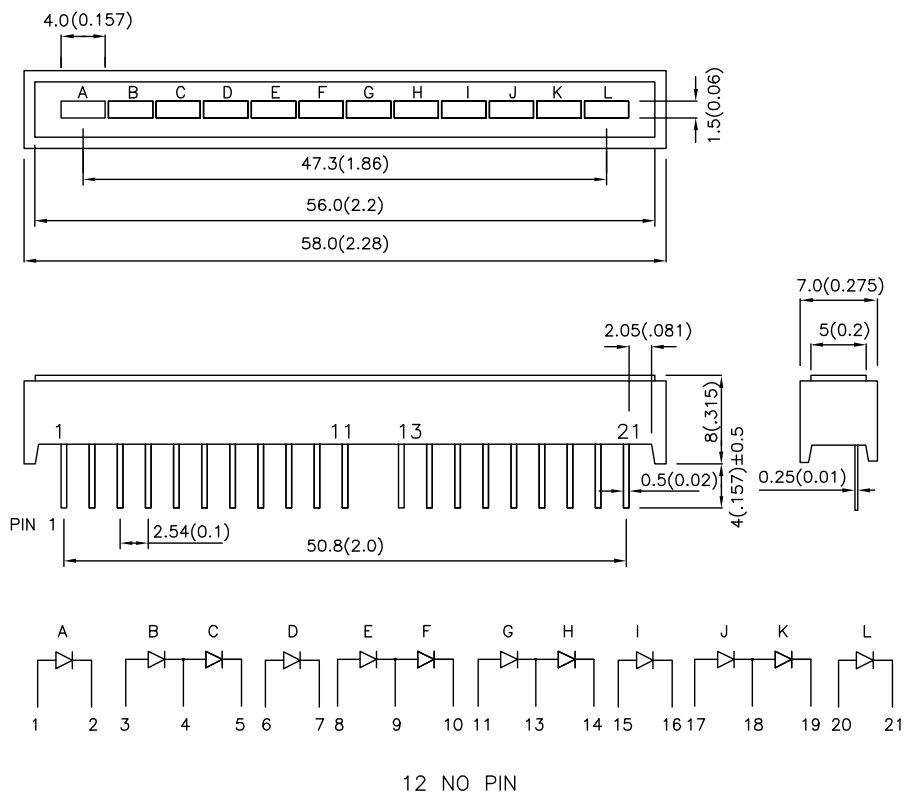
### Features

- SUITABLE FOR LEVEL INDICATORS.
- LOW CURRENT OPERATION.
- WIDE VIEWING ANGLE.
- MECHANICALLY RUGGED.
- DIFFERENT COLORS IN ONE UNIT AVAILABLE.
- STANDARD: BLACK FACE, WHITE SEGMENT.
- RoHS COMPLIANT.

### Description

The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

### Package Dimensions & Internal Circuit Diagram



#### Notes:

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

## Selection Guide

Part No.	Dice	Lens Type	Iv (ucd) @ 10mA		Description
			Min.	Typ.	
DD-12HWB	BRIGHT RED (GaP)	WHITE DIFFUSED	300	1400	12 Segments Bargraph-Display

## Electrical / Optical Characteristics at TA=25°C

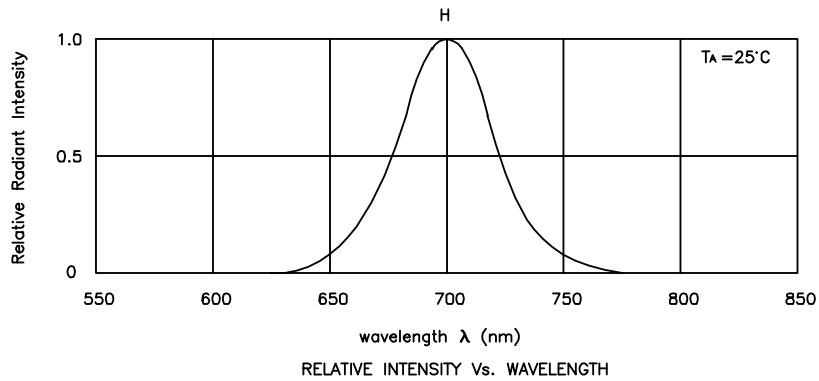
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
$\lambda_{peak}$	Peak Wavelength	Bright Red	700		nm	IF=20mA
$\lambda_D$	Dominant Wavelength	Bright Red	660		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Bright Red	45		nm	IF=20mA
C	Capacitance	Bright Red	40		pF	VF=0V;f=1MHz
VF	Forward Voltage (Per Segment)	Bright Red	2.25	2.5	V	IF=20mA
IR	Reverse Current (Per Segment)	Bright Red		10	uA	VR = 5V

## Absolute Maximum Ratings at TA=25°C

Parameter	Bright Red	Units
Power dissipation (Per Segment)	120	mW
DC Forward Current (Per Segment)	30	mA
Peak Forward Current [1] (Per Segment)	130	mA
Reverse Voltage (Per Segment)	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 5 Seconds	

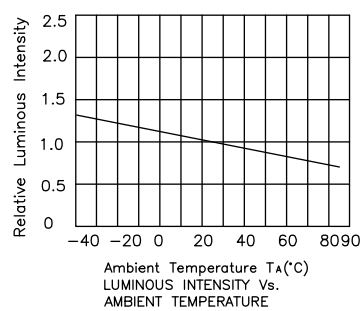
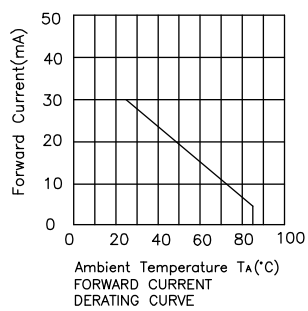
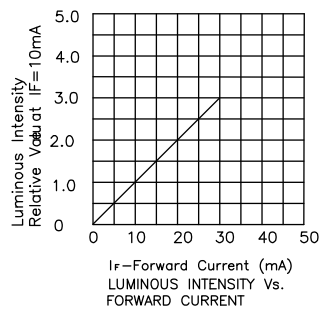
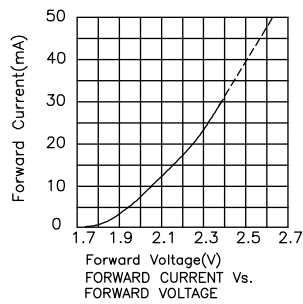
Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2mm below package base.



## Bright Red

## DD-12HWB



### Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity/ Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.