

## 10 SEGMENT BAR GRAPH ARRAYS

DC-10E DC-10Y DC-10G DC-10SR

DC-7G3H

#### Features

- •SUITABLE FOR LEVEL INDICATORS.
- •LOW CURRENT OPERATION.
- •EXCELLENT ON/OFF CONTRAST.
- •WIDE VIEWING ANGLE.
- •END STACKABLE.
- •MECHANICALLY RUGGED.
- •BI-COLOR VERSION AVAILABLE.
- •DIFFERENT COLORS IN ONE UNIT AVAILABLE.

#### Description

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

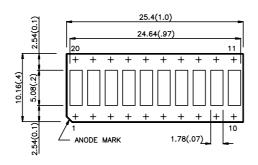
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

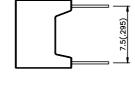
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

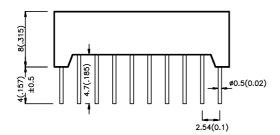
The Yellow source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Yellow Light Emitting Diode.

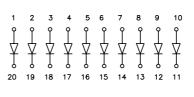
The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

### Package Dimensions & Internal Circuit Diagram









### Notes:

- 1. All dimensions are in millimeters (inches), Tolerance is ±0.25(0.01")unless otherwise noted.
  2. Specifications are subjected to change whitout notice.

## Selection Guide

Part No.	Dice	lv (ucd) @ 10 mA		<b>.</b>	
		Min.	Max.	Description	
DC-10EWA	HIGH EFFICIENCY RED (GaAsP/GaP)	2200	5600		
DC-10GWA	GREEN (GaP)	2200	5600		
DC-10YWA	YELLOW (GaAsP/GaP)	2200	5600	10 Seaments	
DC-10SRWA	SUPER BRIGHT RED (GaAlAs)	5600	31000	10 Segments Bargraph-Display	
DC-7G3HWA	GREEN (GaP)	2200	5600		
	BRIGHT RED (GaP)	900	2200		

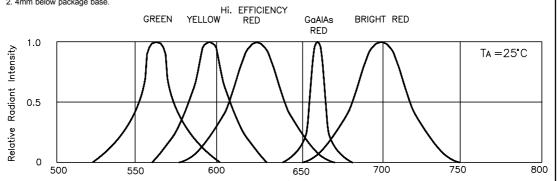
# Electrical / Optical Characteristics at T $_{\text{A}}\text{=-}25^{\circ}\text{C}$

Symbol	Parameter	Device	Device Typ. Max.		Unit	Test Conditions	
λpeak	Peak Wavelength	Bright Red High Efficiency Red Green Yellow Super Bright Red	700 625 565 590 660		nm	IF=20mA	
Δλ1/2	Spectral Line Halfwidth	Bright Red High Efficiency Red Green Yellow Super Bright Red	45 45 30 35 20		nm	IF=20mA	
С	Capacitance	Bright Red High Efficiency Red Green Yellow Super Bright Red	40 12 45 10 95		pF	VF=0V;f=1MHz	
VF	Forward Voltage	Bright Red High Efficiency Red Green Yellow Super Bright Red	2.0 2.0 2.2 2.1 1.85	2.5 2.5 2.5 2.5 2.5	V	IF=20mA	
I <sub>R</sub>	Reverse Current	All	10		uA	VR = 5V	

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

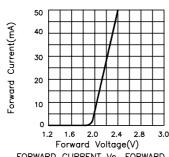
Parameter	Bright Red	High Efficiency Red	Green	Yellow	Super Bright Red	Units	
Power dissipation	120	105	105	105	100	mW	
DC Forward Current	25	30	25	30	30	mA	
Peak Forward Current [1]	150	150	150	150	150	mA	
Reverse Voltage	5	5	5	5	5	V	
Operating/Storage Temperature	-40°C To +85°C						
Lead Soldering Temperature [2]	260 °C For 5 Seconds						

Notes: 1. 1/10 Duty Cycle, 0.1ms Pulse Width. 2. 4mm below package base.

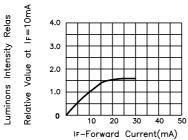


Wavelength  $\lambda$  (nm) RELATIVE INTENSITY Vs. WAVELENGTH

## Bright Red



FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT

