

20mm (0.8 INCH) 16 SEGMENT SINGLE DIGIT ALPHANUMERIC DISPLAYS

PSA08-11 PSC08-11 PSC08-12 PSC08-12

Features

- •0.8 INCH CHARACTER HEIGHT.
- •LOW CURRENT OPERATION.
- •HIGH CONTRAST AND LIGHT OUTPUT.
- COMMON CATHODE AND COMMON ANODE AVAILABLE.
- •EASY MOUNTING ON P.C. BOARDS OR SOCKETS.
- •CATEGORIZED FOR LUMINOUS INTENSITY,

YELLOW AND GREEN CATEGORIZED FOR COLOR.

- •MECHANICALLY RUGGED.
- •STANDARD: GRAY FACE, WHITE SEGMENT.

Description

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

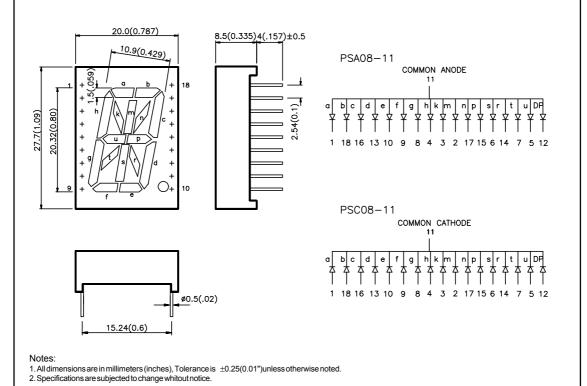
The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

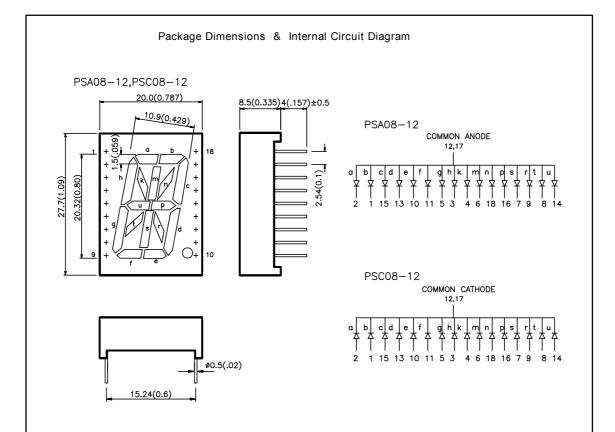
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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





Selection Guide

| Part No. | Dice | lv (ucd) @ 10 mA | | 5 | |
|------------------------------|---------------------------------|---------------------|-------|---------------------------------|--|
| | | Min. | Max. | Description | |
| PSA08-11HWA PSA08-12HWA | PRICHT PED (Cap) | 560 | 1400 | Common Anode, Rt. Hand Decimal | |
| PSC08-11HWA PSC08-12HWA | BRIGHT RED (GaP) | | | Common Cathode, Rt Hand Decimal | |
| PSA08-11EWA PSA08-12EWA | LUCULEFFICIENCY DED (CAAAD(CAD) | 2200 | 9000 | Common Anode, Rt. Hand Decimal | |
| PSC08-11EWA PSC08-12EWA | HIGH EFFICIENCY RED (GaAsP/GaP) | | | Common Cathode, Rt Hand Decimal | |
| PSA08-11GWA PSA08-12GWA | CDEEN (Cap) | 1400 | 3600 | Common Anode, Rt. Hand Decimal | |
| PSC08-11GWA PSC08-12GWA | GREEN (GaP) | | | Common Cathode, Rt Hand Decimal | |
| PSA08-11YWA PSA08-12YWA | VELLOW (CoAsB/CoB) | 1400 | 3600 | Common Anode, Rt. Hand Decimal | |
| PSC08-11YWA PSC08-12YWA | YELLOW (GaAsP/GaP) | | | Common Cathode, Rt Hand Decimal | |
| PSA08-11SRWA PSA08-12SRWA | OUDED DDIOUT DED (O-AIA-) | 9000 | 21000 | Common Anode, Rt. Hand Decimal | |
| PSC08-11SRWA PSC08-12SRWA | SUPER BRIGHT RED (GaAlAs) | | | Common Cathode, Rt Hand Decimal | |

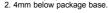
Electrical / Optical Characteristics at T_A =25°C

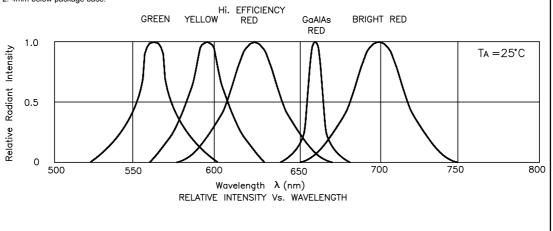
| Symbol | Parameter | Device | Тур. | Max. | Units | Test Conditions |
|----------------|----------------------------|--|----------------------------------|---------------------------------|-------|-----------------|
| λpeak | Peak Wavelength | Bright Red High Efficiency Red Green Yellow Super Bright 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 _R | Reverse Current | All | 10 | | uA | VR = 5V |

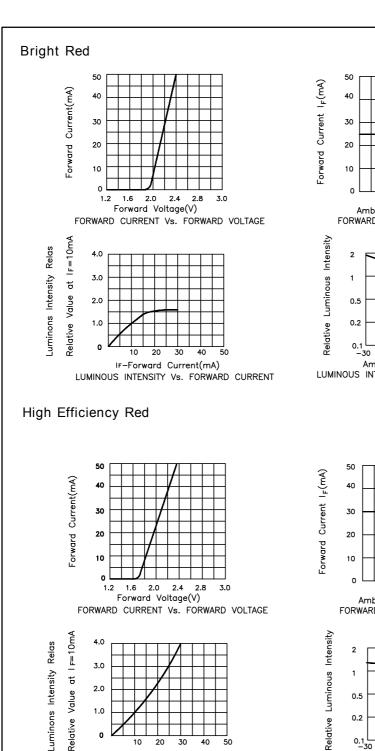
Absolute Maximum Ratings at T_A =25°C

| 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.





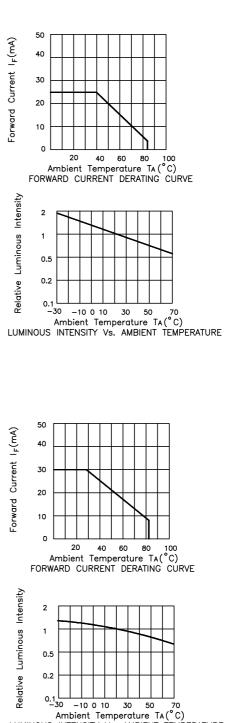


Luminons Intensity Relas

3.0 2.0 1.0

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IF-Forward Current(mA) LUMINOUS INTENSITY Vs. FORWARD CURRENT



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

