

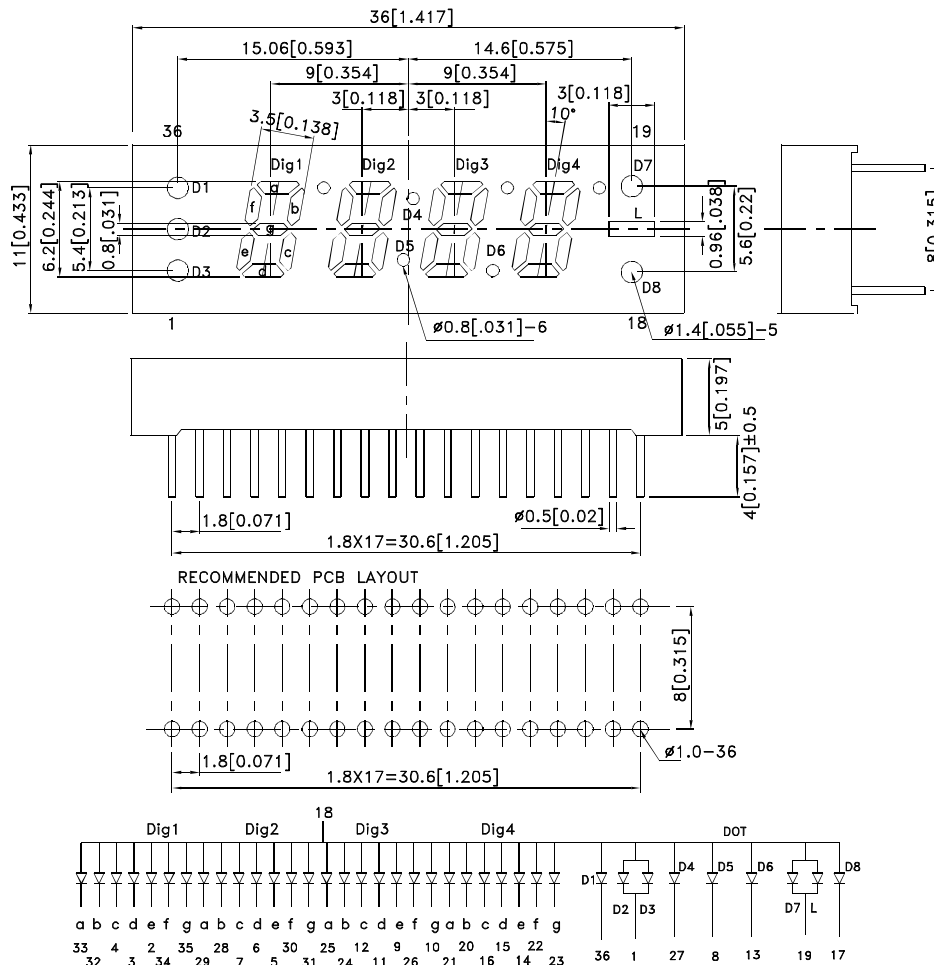
Features

- 0.25 inch digit height
- Low current operation.
- Excellent character appearance.
- Easy mounting on P.C. boards or sockets.
- Categorized for luminous intensity.
- Mechanically rugged.
- Standard : gray face, white segment.
- RoHS compliant.

Description

The Hyper Red source color devices are made with AlGaInP on GaAs substrate 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. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.



Selection Guide

| Part No. | Dice | Lens Type | Iv (ucd) [1] @ 10mA | | Description |
|---------------|---------------------|----------------|------------------------|-------|--------------|
| | | | Min. | Typ. | |
| CA25-11SURKWA | Hyper Red (AlGaInP) | White Diffused | 31000 | 80000 | Common Anode |

Note:

1. Luminous intensity/ luminous Flux: +/-15%.

Electrical / Optical Characteristics at TA=25°C

| Symbol | Parameter | | Device | Typ. | Max. | Units | Test Conditions |
|---------------------|--------------------------|---|-----------|------|------|-------|-----------------|
| λ peak | Peak Wavelength | | Hyper Red | 650 | | nm | IF=20mA |
| λ D [1] | Dominant Wavelength | | Hyper Red | 630 | | nm | IF=20mA |
| $\Delta\lambda$ 1/2 | Spectral Line Half-width | | Hyper Red | 28 | | nm | IF=20mA |
| C | Capacitance | | Hyper Red | 35 | | pF | VF=0V;f=1MHz |
| VF [2] | Forward Voltage | Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D4,D5,D6,D8 | Hyper Red | 1.95 | 2.5 | V | IF=20mA |
| | | D2,D3,D7,L | | | | | |
| IR | Reverse Current | Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D4,D5,D6,D8 | Hyper Red | | 10 | uA | VR = 5V |
| | | D2,D3,D7,L | | | 20 | | |

Notes:

1.Wavelength: +/-1nm.

2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C

| Parameter | | Hyper Red | Units |
|-------------------------------|---|-----------------------|-------|
| Power dissipation | Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D4,D5,D6,D8 | 75 | mW |
| | D2,D3,D7,L | 150 | |
| DCForward Current | Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D4,D5,D6,D8 | 30 | mA |
| | D2,D3,D7,L | 60 | |
| Reverse Voltage | Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D4,D5,D6,D8 | 5 | V |
| | D2,D3,D7,L | | |
| PeakForward Current [1] | Dig1'8,'Dig2'8',Dig3'8',Dig4'8' D1,D4,D5,D6,D8 | 185 | mA |
| | D2,D3,D7,L | 370 | |
| Operating/Storage Temperature | | -40°C To +85°C | |
| Lead Solder Temperature [2] | | 260°C For 3~5 Seconds | |

Notes:

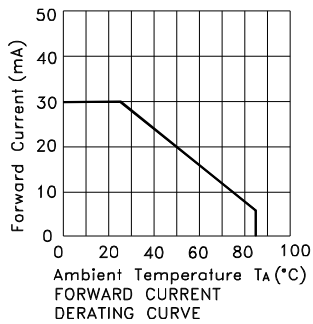
1. 1/10 Duty Cycle, 0.1ms Pulse Width.

2. 2mm below package base.

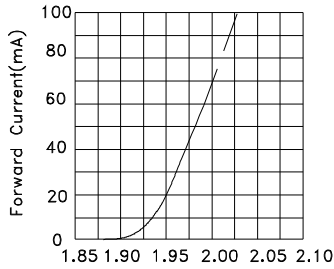


Hyper Red

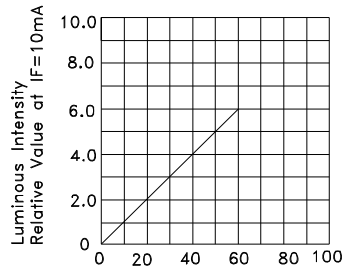
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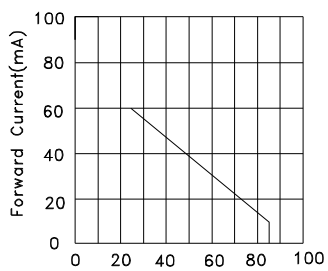
Hyper Red



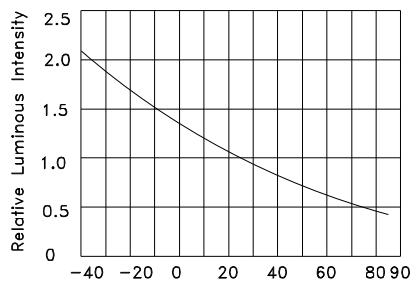
Forward Voltage(V)
FORWARD CURRENT Vs
FORWARD VOLTAGE



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



Ambient Temperature TA (°C)
FORWARD CURRENT
DERATING CURVE



Ambient Temperature TA (°C)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

PACKING & LABEL SPECIFICATIONS

CA25-11SURKWA

