



|           |            |
|-----------|------------|
| Spec. No. | PS-ND-0807 |
| Rev.      | A          |

# PRODUCT SPECIFICATION

**Model No : CSS-3014G/3015G**

## Descriptions:

- 3.0 Inch Single Digit Display
- Emitting Color : Yellow Green



| CUSTOMER APPROVED | APPROVED BY | CHECKED BY | PREPARED BY |
|-------------------|-------------|------------|-------------|
| SIGNATURES        |             |            | 陳新強         |

CHINA SEMICONDUCTOR CORPORATION  
Address:2FL. NO.909,Chung-Cheng Road,  
Chung-Ho City Taipei Hsien,Taiwan.

Tel:886-2-2223-9696  
Fax:886-2-2223-9377

OPTO PLUS TECHNOLOGIES CO.,LTD  
Address:696 Shun jiang Rd.,Ji Shan St.Shaoxing,  
ZheJiang,China

Tel:86-0575-88623888  
Fax:86-0575-88623112

<http://www.csctw.com.tw>



### Model No : CSS-3014G/3015G

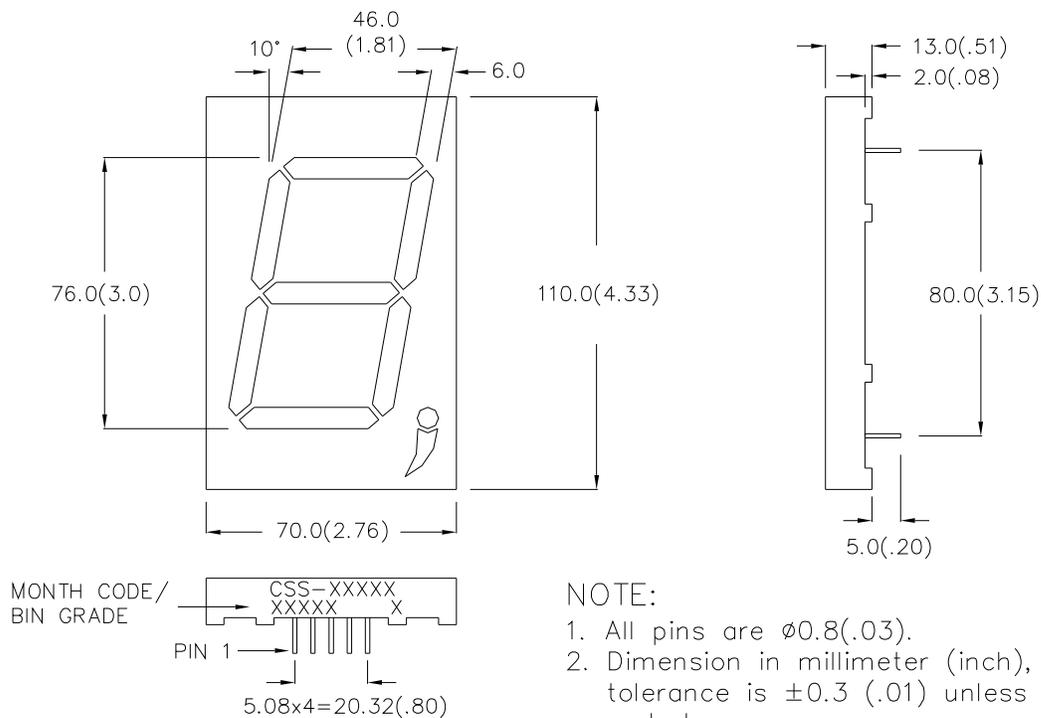
#### ■ Features -

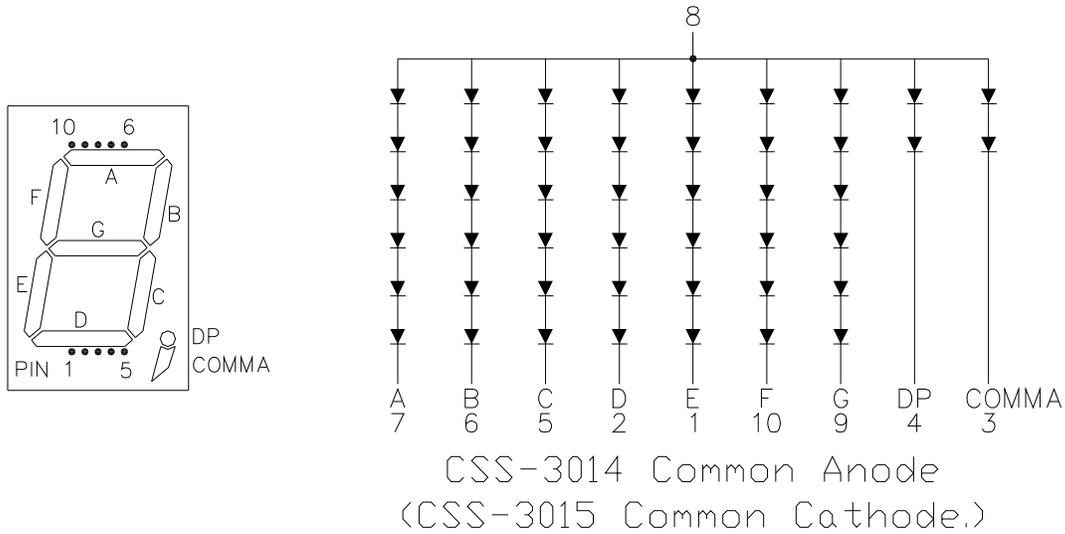
1. 3.0 inch (76.0mm) digit height.
2. Case mold type.
3. RoHS compliant.
4. Low power consumption.
5. Easy mounting on P.C. board or socket.

#### ■ Device Selection Guide -

| Part No.  | Chip     |               | Description    |
|-----------|----------|---------------|----------------|
|           | Material | Emitted Color |                |
| CSS-3014G | GaP      | Yellow Green  | Common Anode   |
| CSS-3015G | GaP      | Yellow Green  | Common Cathode |

#### ■ Mechanical Dimensions -




**Model No : CSS-3014G/3015G**
**Internal Circuit Diagrams -**

**Absolute Maximum Rating -**

(Ta=25°C)

| Parameter   | Symbol | Rating    | Unit  |
|---|--------|-----------|-------|
| Power Dissipation Per Dice  | Pd     | 70        | mW    |
| Continuous Forward Current Per Dice                                   | IAF    | 25        | mA    |
| Peak Current Per Dice   | IPF    | 90        | mA    |
| Continuous Forward Current Per Dice                                   | -      | 0.33      | mA/°C |
| Reverse Voltage Per Dice  | VR     | 5         | V     |
| Operating Temperature   | Topr   | -35 ~ +85 | °C    |
| Storage Temperature   | Tstg   | -35 ~ +85 | °C    |
| Solder temperature 1/16 inch below seating plane for 3 seconds at 260 |        |           |       |


**Model No : CSS-3014G/3015G**
**Electro-optical Characteristics -**

(Ta=25°C)

| Parameter                         | Symbol           | Min. | Typ.      | Max.      | Unit    | Condition |
|-----------------------------------|------------------|------|-----------|-----------|---------|-----------|
| Forward Voltage Per Segment(DP)   | VF               | -    | 12.6(4.2) | 16.8(5.6) | V       | IF=20mA   |
| Luminous Intensity Per Segment    | Iv               | -    | 30        | -         | mcd     | IF=10mA   |
| Peak Emission Wavelength          | $\lambda P$      | -    | 568       | -         | nm      | IF=20mA   |
| Dominant Wavelength               | $\lambda d$      | -    | 572       | -         | nm      | IF=20mA   |
| Spectrum Radiation Bandwidth      | $\Delta \lambda$ | -    | 30        | -         | nm      | IF=20mA   |
| Reverse Current                   | IR               | -    | -         | 100       | $\mu$ A | VR=24V    |
| Luminous Intensity Matching Ratio | IV-m             | -    | -         | 2:1       | -       | IF=20mA   |



|           |            |
|-----------|------------|
| Spec. No. | PS-ND-0807 |
| Rev.      | A          |

**Model No : CSS-3014G/3015G**

**Typical Electrical / Optical Characteristics Curves -**

**(Ta = 25°C Unless Otherwise Noted)**

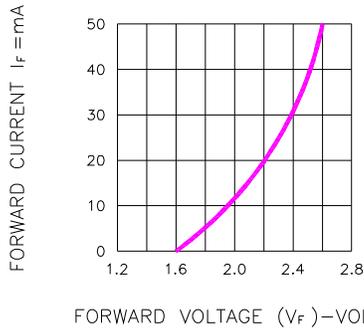


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

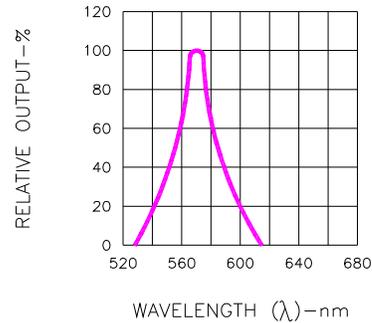


Fig.2 SPECTRAL RESPONSE

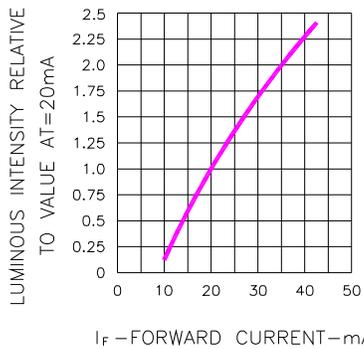


Fig.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

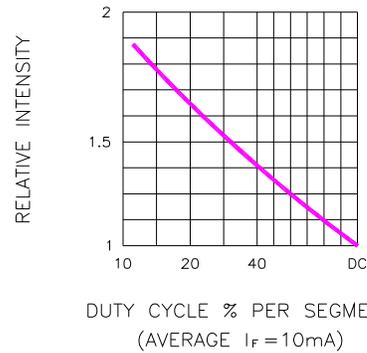


Fig.5 LUMINOUS INTENSITY VS. DUTY CYCLE

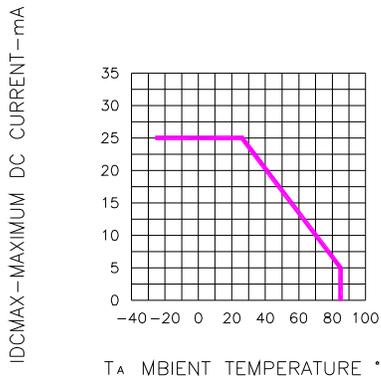


Fig.4 MAXIMUM ALLOWABLE DC CURRENT PER SEGMENT VS. A FUNCTION OF AMBIENT TEMPERATURE



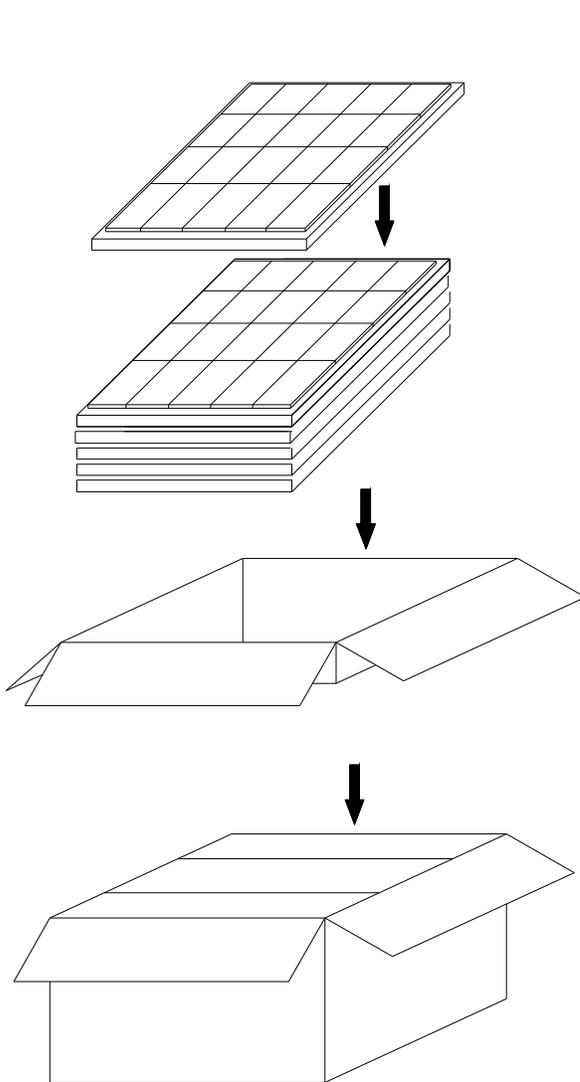
Fig.6 MAX PEAK CURRENT VS. DUTY CYCLE % (REFRESH RATE f=1 KHz)



|           |            |
|-----------|------------|
| Spec. No. | PS-ND-0807 |
| Rev.      | A          |

Model No : CSS-3014G/3015G

■ Package Dimensions



Single Digit Display  
Dice Code  
CSS-301XX

14 pcs per polyform

5 polyform per box

Q'TY: 70 pcs

3 boxes per carton

Q'TY: 210 pcs

Carton Size:  
L540xW485xH305.5mm

Note: The specifications are subject to change without notice. Please contact us for updated informatio  
<http://www.csctw.com.tw>