



PRODUCT SPECIFICATION

Model No : CSM-58111V9/58121V9

| Descriptions: |
|---|
| <ul style="list-style-type: none"> • 1.4 Inch 5X8 Dot-Matrix Display • Dot Pitch 4.7mm • CSM-58111: Column Anode, Row Cathode • CSM-58121: Column Cathode, Row Anode • Emitting Color: Super Bright Orange |



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

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:86-0575-8623888
 Fax:86-0575-8623112



Model No: CSM-58111/58121V9

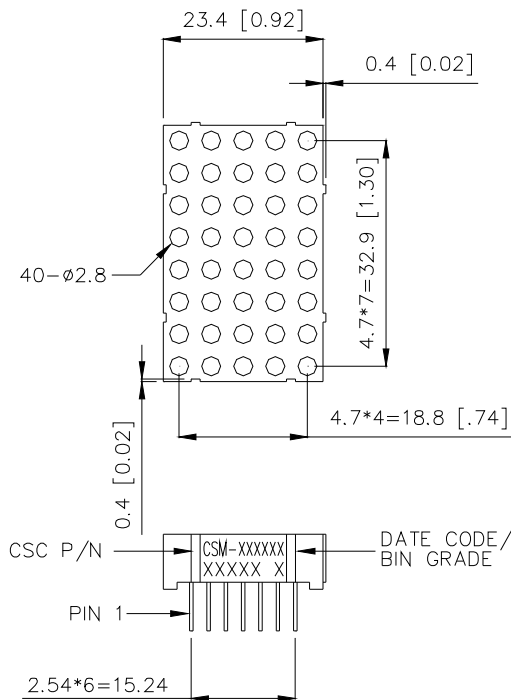
Features -

1. 1.4 inch (35.7mm) Matrix 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 | | Column | Row |
|--------------------|----------------|----------------------------|----------------|----------------|
| | Material | Emitted Color | | |
| CSM-58111V9 | AlGaInP | Super Bright Orange | Anode | Cathode |
| CSM-58121V9 | AlGaInP | Super Bright Orange | Cathode | Anode |

Package Dimensions -

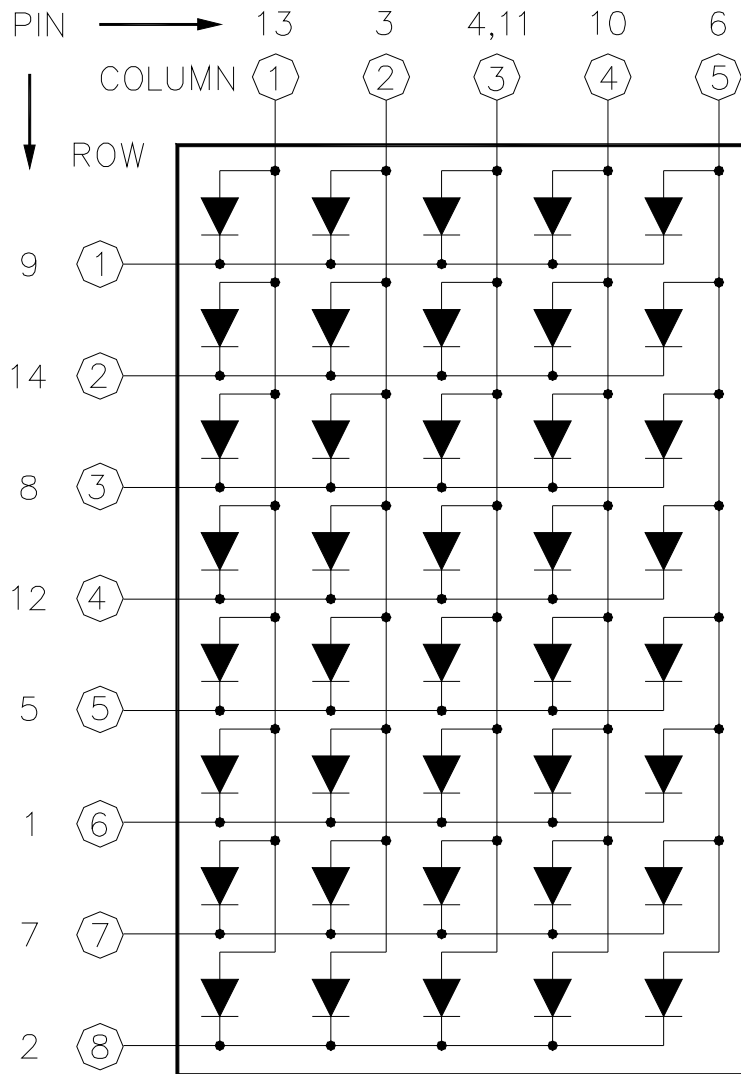


NOTE:
 1 All pins are $\phi 0.5(.02)$.
 2 Dimension in millimeters (inch), tolerance is $\pm 0.25 (.01)$ unless otherwise noted.



Model No: CSM-58111/58121V9

Internal Circuit Diagrams -



CSM-58111 Column Anode, Row Cathode.
(CSM-58121 Column Cathode, Row Anode.)



Model No: CSM-58111/58121V9

■ Absolute Maximum Rating -

(Ta=25°C)

| Parameter | Symbol | Rating | Unit |
|---|-------------|-----------|-------|
| Power Dissipation Per Dice | Pd | 75 | mW |
| Continuous Forward Current Per Dice | IAF | 25 | mA |
| Peak Current Per Dice(duty cycle 1/10, 1kHz) | IPF | 90 | mA |
| Derating Linear From 25°C Per Dice | - | 0.33 | mA/°C |
| Reverse Voltage Per Dice | VR | 5 | V |
| Operating Temp. | Topr | -35 ~ +85 | °C |
| Storage Temp. | Tstg | -35 ~ +85 | °C |
| Solder temperature 1/16 inch below seating plane for 3 seconds at 260°C | | | |

■ Electro-optical Characteristics -

(Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Condition |
|-----------------------------------|------------------|------|------|------|---------|-----------|
| Forward Voltage Per Segment | VF | - | 2.1 | 2.8 | V | IF=20mA |
| Luminous Intensity Per Segment | Iv | - | 25 | - | mcd | IF=10mA |
| Peak Emission Wavelength | λ_p | - | 632 | - | nm | IF=20mA |
| Dominant Wavelength | λ_d | - | 624 | - | nm | IF=20mA |
| Spectrum Radiation Bandwidth | $\Delta \lambda$ | - | 20 | - | nm | IF=20mA |
| Reverse Current | IR | - | - | 100 | μA | VR=5V |
| Luminous Intensity Matching Ratio | IV-m | - | - | 2:1 | - | IF=10mA |



Model No: CSM-58111/58121V9

■ Typical Electrical / Optical Characteristics Curves -

(Ta = 25°C Unless Otherwise Noted)

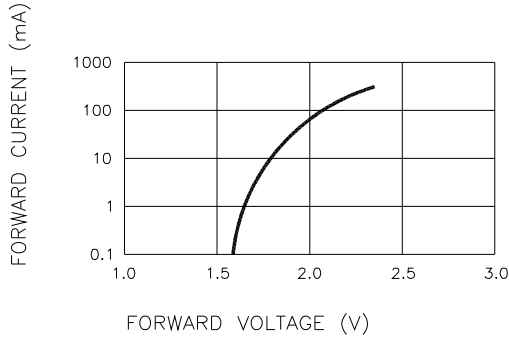


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

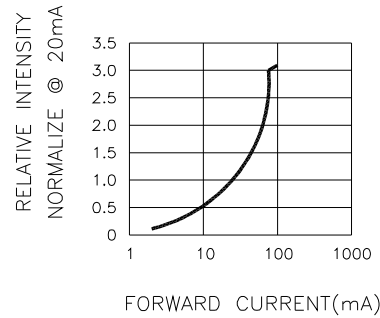


Fig.2 RELATIVE INTENSITY VS. FORWARD CURRENT

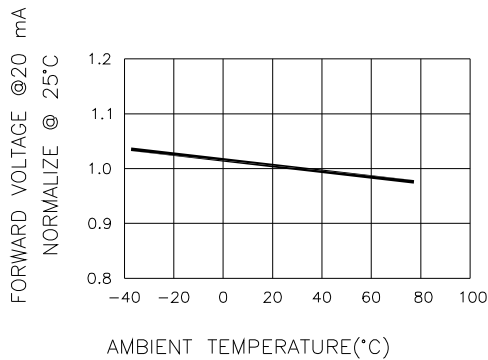


Fig.3 FORWARD VOLTAGE VS. TEMPERATURE

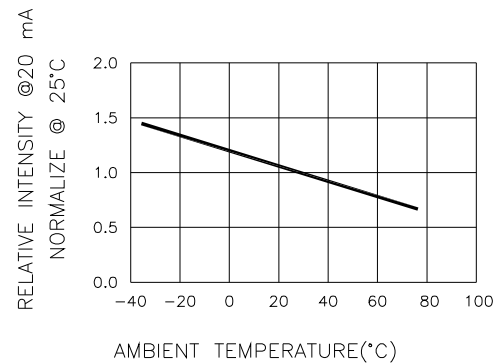


Fig.4 RELATIVE INTENSITY VS. TEMPERATURE

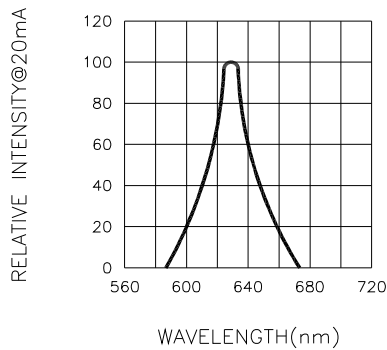


Fig.5 RELATIVE INTENSITY VS. WAVELENGTH