

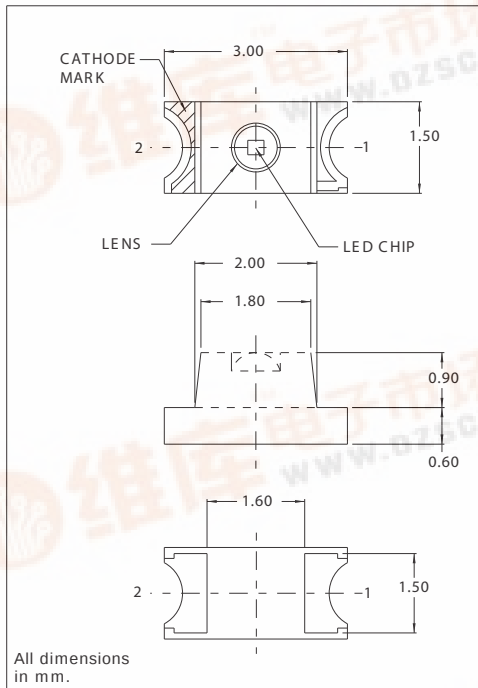
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**CHICAGO MINIATURE LAMP, INC.**  
WHERE INNOVATION COMES TO LIGHT

## 7010X Series SMT LEDs 1206 Package Size

### DESCRIPTION AND FEATURES



#### Surface Mount Technology

- Tape and reel packaged for high-speed autoinsertion.
- Convection and vapor-phase reflow compatible.
- Compact form enables high density placement.
- Packaged 2500 pieces per reel.

#### Leading Edge LED Optoelectronic Performance

- Consistent high brightness.

#### Exceptional Reliability

- Stringent process controls assure quality.
- Extensive qualification testing to meet strictest requirements.
- Designed to permit easy post-reflow solder joint inspection.

- Solder pad geometry on page 1-X2.

### ELECTRO-OPTICAL CHARACTERISTICS AND RATINGS

| PART NUMBER                                           | 7010X1       | 7010X3       | 7010X5       | 7010X7       | 7010X11      | 7010X13      | 7010X15      |
|-------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Output Color                                          | Red          | Orange       | Green        | Yellow       | Red          | Yellow       | Green        |
| Diffusion                                             | Non-Diffused | Non-Diffused | Non-Diffused | Non-Diffused | Non-Diffused | Non-Diffused | Non-Diffused |
| Package Color                                         | Clear        | Clear        | Clear        | Clear        | Clear        | Clear        | Clear        |
| Test Current (mA)                                     | 20           | 20           | 20           | 20           | 20           | 20           | 20           |
| Forward Voltage Typ. (V)                              | 2.0          | 2.2          | 2.1          | 2.1          | 1.7          | 2.2          | 2.1          |
| Forward Voltage Max. (V)                              | 2.5          | 2.5          | 2.5          | 2.5          | 2.0          | 2.5          | 2.5          |
| Luminous Intensity Min. (mcd)                         | 3.5          | 5.0          | 3.0          | 6.0          | 6.0          | 3.0          | 0.9          |
| Luminous Intensity Typ. (mcd)                         | 6.0          | 9.0          | 7.5          | 12.0         | 17.0         | 6.0          | 2.3          |
| Luminous Intensity Max. (mcd)                         | -            | -            | -            | -            | -            | -            | -            |
| Peak Wavelength (nm)                                  | 630          | 605          | 560          | 570          | 660          | 580          | 555          |
| Viewing Angle 2θ 1/2 (degrees)                        | 70           | 70           | 70           | 70           | 70           | 70           | 70           |
| Power Dissipation (mW)                                | 75           | 75           | 75           | 75           | 60           | 75           | 75           |
| Operating Temperature (°C)                            | -30 to +85   | -30 to +85   | -30 to +85   | -30 to +85   | -30 to +85   | -30 to +85   | -30 to +85   |
| Storage Temperature (°C)                              | -40 to +100  | -40 to +100  | -40 to +100  | -40 to +100  | -40 to +100  | -40 to +100  | -40 to +100  |
| Peak Forward Current Max. (1µs @ 10% duty cycle) (mA) | 70           | 70           | 70           | 70           | 70           | 70           | 70           |
| Reverse Voltage (IR=100µA) (V)                        | 4            | 4            | 4            | 4            | 4            | 4            | 4            |
| Lead Solder Time @ 260°C                              | 5            | 5            | 5            | 5            | 5            | 5            | 5            |

Chicago Miniature Lamp reserves the right to make specification revisions that enhance the design and/or performance of the product