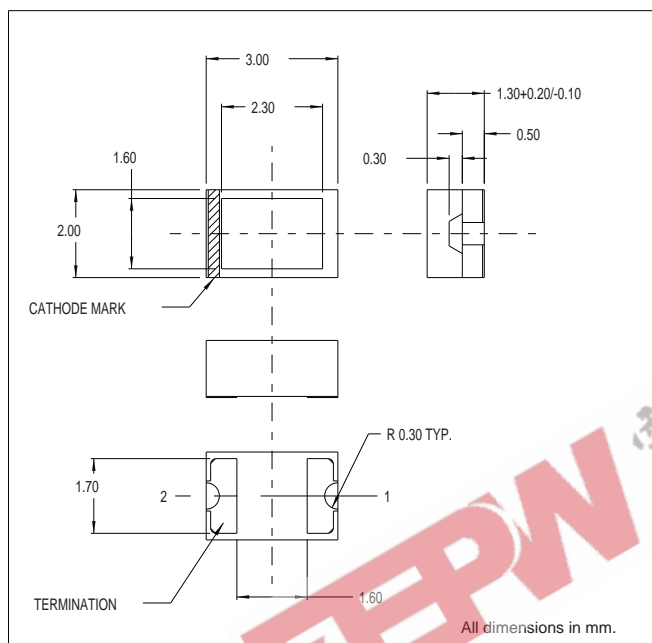




7016X Series SMT LEDs 1208 Package Size

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-X1.

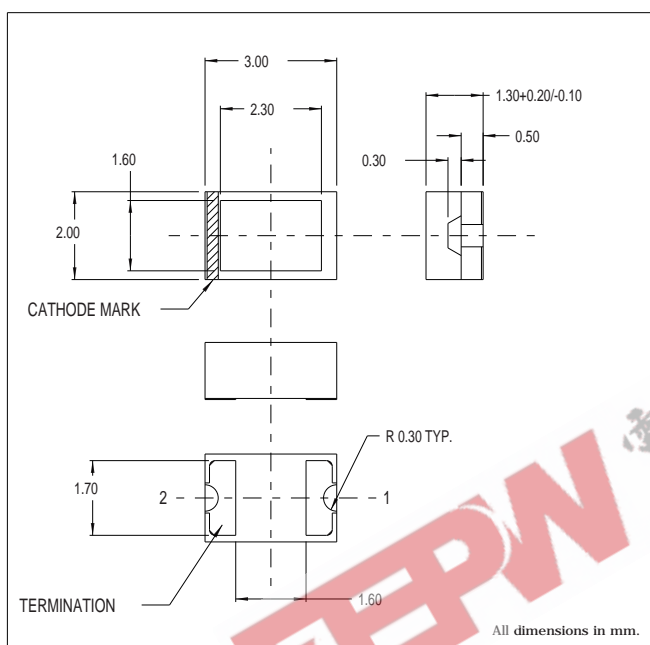
ELECTRO-OPTICAL CHARACTERISTICS AND RATINGS

| PART NUMBER | 7016X13 | 7016X1 | 7016X3 | 7016X5 | 7016X11 |
|---|--------------|--------------|--------------|--------------|--------------|
| Output Color | Amber | Red | Yellow | Green | Red |
| Diffusion | Non-Diffused | Non-Diffused | Non-Diffused | Non-Diffused | Non-Diffused |
| Package Color | Clear | Clear | Clear | Clear | Clear |
| Test Current (mA) | 20 | 20 | 20 | 20 | 20 |
| Forward Voltage Typ. (V) | 2.0 | 2.0 | 2.1 | 2.2 | 1.75 |
| Forward Voltage Max. (V) | 2.8 | 2.8 | 2.8 | 2.8 | 2.5 |
| Luminous Intensity Min. (mcd) | 2.2 | 2.2 | 2.2 | 5.6 | 5.6 |
| Luminous Intensity Typ. (mcd) | 6.3 | 6.3 | 6.3 | 16.0 | 16.0 |
| Luminous Intensity Max. (mcd) | 1.7 | 2.2 | 2.1 | 2.2 | 2.1 |
| Peak Wavelength (nm) | 610 | 650 | 585 | 563 | 660 |
| Viewing Angle 2θ 1/2 (degrees) | 110 | 110 | 110 | 110 | 110 |
| Power Dissipation (mW) | 75 | 75 | 75 | 75 | 75 |
| Operating Temperature (°C) | -25 to +80 | -25 to +80 | -25 to +80 | -25 to +80 | -25 to +80 |
| Storage Temperature (°C) | -30 to +85 | -30 to +85 | -30 to +85 | -30 to +85 | -30 to +85 |
| Peak Forward Current Max. (1µs @ 10% duty cycle) (mA) | 75 | 75 | 75 | 75 | 75 |



7016X Series Bicolor SMT LEDs

DESCRIPTION AND FEATURES



Color Combinations:

- Red/Green
- Green/Yellow

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 | 7016X1/5 | 7016X5/7 |
|--|--------------|--------------|
| Output Color | Red/Green | Green/Yellow |
| Diffused/Non-Diffused | Non-Diffused | Non-Diffused |
| Package Color | Clear | Clear |
| Power Dissipation (mW) | 60 | 60 |
| Peak Forward Current Max. (mA) | 75/60 | 60 |
| Reverse Current Max. ($V_R=4V$) | 100 | 100 |
| Operating temperature ($^{\circ}C$) | -25 to +80 | -25 to +80 |
| Storage Temperature ($^{\circ}C$) | -30 to +85 | -30 to +85 |
| Forward Voltage Typ. ($I_F=20mA$) | 1.75/2.2 | 2.2/2.2 |
| Forward Voltage Max. ($I_F=20mA$) | 2.5/2.8 | 2.8/2.8 |
| Viewing Angle (degrees) | 110 | 110 |
| Luminous Intensity Min. ($I_F=20mA$) | 9.0 | 9.0 |
| Luminous Intensity Max. ($I_F=20mA$) | 16/20 | 20/16 |
| Peak Wavelength ($I_F=20mA$) | 660/570 | 570/580 |
| Rated Current (mA) | 20/20 | 20/20 |
| Continuous Forward Current Max. (mA) | 30/25 | 25 |