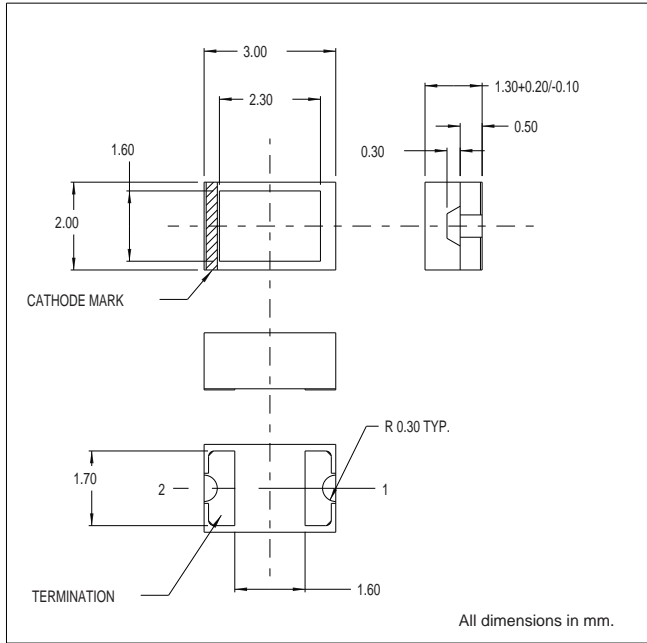




**7016X Series SMT LEDs 1208 Package Size**

**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**

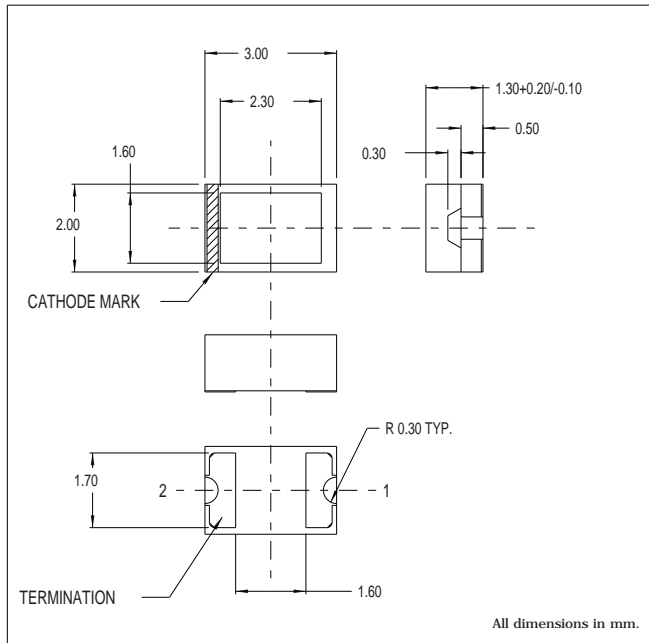
PART NUMBER	7016X13	7016X1	7016X3	7016X5	7016X11
Output Color	Amber	Red	Yellow	Green	Red
Diffusion	Non-Diffused	Non-Diffused	Non-Diffused	Non-Diffused	Non-Diffused
Package Color	Clear	Clear	Clear	Clear	Clear
Test Current (mA)	20	20	20	20	20
Forward Voltage Typ. (V)	2.0	2.0	2.1	2.2	1.75
Forward Voltage 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

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



## 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. (IF=20mA)	1.75/2.2	2.2/2.2
Forward Voltage Max. (IF=20mA)	2.5/2.8	2.8/2.8
Viewing Angle (degrees)	110	110
Luminous Intensity Min. (IF=20mA)	9.0	9.0
Luminous Intensity Max. (IF=20mA)	16/20	20/16
Peak Wavelength (IF=20mA)	660/570	570/580
Rated Current (mA)	20/20	20/20
Continuous Forward Current Max. (mA)	30/25	25

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