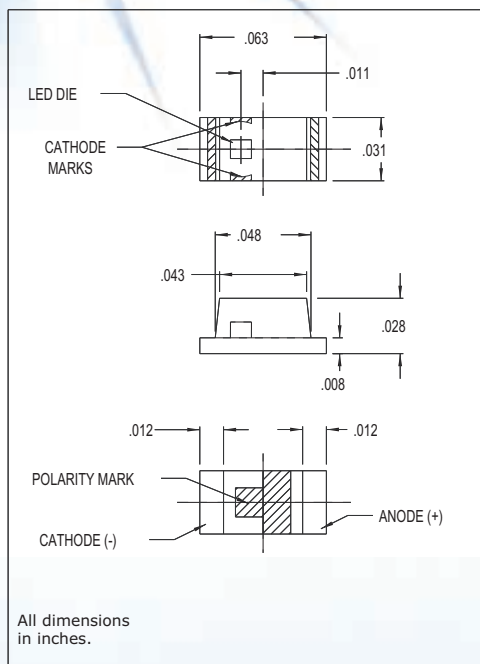


7017X Series Surface Mount LEDs 0603 Package Size

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 4000 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.
- Solderpad geometry on page 1-X1.

ELECTRO-OPTICAL CHARACTERISTICS AND RATINGS

| PART NUMBER | 7017X21 | 7017X23 | 7017X3 | 7017X15 | 7017X13 | 7017X5 | 7017X1 | 7017X7 | 7017X33 |
|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|-------------|
| Output Color | Red | Orange | Orange | Green | Yellow | Green | Red | Yellow/Green | Yellow |
| Diffusion | Diffused | Diffused | Diffused | Diffused | Diffused | Diffused | Diffused | Diffused | Diffused |
| Package Color | White | White | Clear | Clear | Clear | Clear | Clear | Clear | White |
| Test Current (mA) | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Forward Voltage Typ. (V) | 1.9 | 1.9 | 2.2 | 2.1 | 2.2 | 2.1 | 1.7 | 2.1 | 1.9 |
| Forward Voltage Max. (V) | 2.4 | 2.4 | 2.8 | 2.8 | 2.8 | 2.8 | 2.3 | 2.8 | 2.4 |
| Luminous Intensity Min. (mcd) | 16 | 16 | 2.0 | 1.4 | 2.0 | 3.8 | 7.0 | 7.0 | 16 |
| Luminous Intensity Typ. (mcd) | 50 | 65 | 3.4 | 2.4 | 3.4 | 6.4 | 11.7 | 11.7 | 65 |
| Luminous Intensity Max. (mcd) | - | - | - | - | - | - | - | - | - |
| Peak Wavelength (nm) | 630 | 609 | 605 | 555 | 580 | 560 | 660 | 570 | 592 |
| Viewing Angle 2θ 1/2 (degrees) | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 |
| Power Dissipation (mW) | 81 | 81 | 70 | 70 | 70 | 70 | 57.5 | 70 | 81 |
| Operating Temperature (°C) | -40 to +85 | -40 to +85 | -30 to +85 | -30 to +85 | -30 to +85 | -30 to +85 | -30 to +85 | -30 to +85 | -40 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 | -40 to +100 | -40 to +100 |
| Peak Forward Current Max. (1μs @ 10% duty cycle) (mA) | 100 | 100 | 60 | 60 | 60 | 60 | 60 | 60 | 100 |
| Reverse Voltage (IR=100μA) (V) | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| Lead Solder Time @ 260°C | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |