

PL11 Series 4mm (T1 3/4) LED

Features

*Available in Color, White Diffused (WD), Color Transparent (CT), and Water Clear (WC)

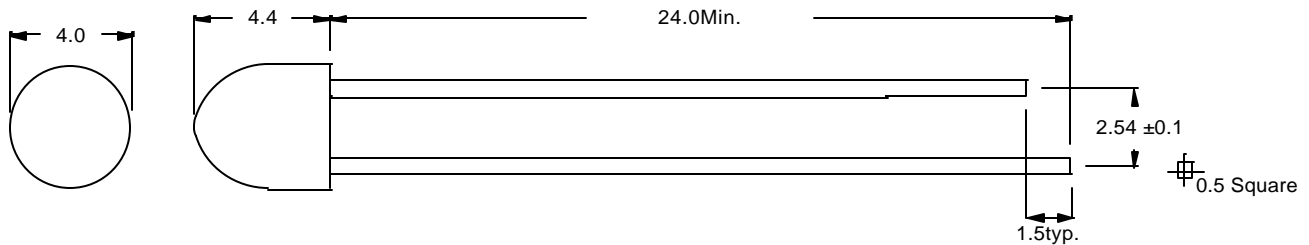
Absolute Maximum Ratings at T_A = 25 °C

| | |
|--|--------------------|
| Reverse Voltage (<100µA)..... | 5.0V |
| Max Forward Current..... | 30mA |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)..... | 100mA |
| Operating Temperature Range..... | -25°C to + 85°C |
| Storage Temperature Range..... | -25°C to +100°C |
| Soldering Temperature (1.6mm below body)..... | 260° for 5 seconds |

Electrical & Optical Characteristics at T_A = 25 °C

| Part Number | | Emitting Color | Material | Peak Wave Length | View Angle 2θ ½ | Forward Voltage @20mA (V) | | Luminous Intensity @20mA (mcd) | |
|-------------------|----------------|----------------|--------------|------------------|-----------------|---------------------------|-----|--------------------------------|------|
| | | | | | | Typ | Max | Min | Typ |
| Color Diffused | White Diffused | | | (nm) | Deg | Typ | Max | Min | Typ |
| PL11-CDR24 | PL11-WDR24 | Bright Red | GaP | 700 | 42° | 2.1 | 3.0 | 4.4 | 7.4 |
| PL11-CDR12 | PL11-WDR12 | Hi Eff Red | GaAsP on GaP | 635 | | 2.1 | 3.0 | 13.4 | 22.2 |
| PL11-CDG13 | PL11-WDG13 | Green | GaP | 567 | | 2.1 | 3.0 | 11.6 | 19.3 |
| PL11-CDY01 | PL11-WDY01 | Yellow | GaAsP on GaP | 585 | | 2.1 | 3.0 | 9.4 | 15.7 |
| PL11-CDA02 | PL11-WDA02 | Amber | GaAsP on GaP | 610 | | 2.1 | 3.0 | 13.4 | 22.2 |
| PL11-CDO12 | PL11-WDO12 | Orange | GaAsP on GaP | 635 | | 2.1 | 3.0 | 13.4 | 22.2 |
| Color Transparent | Water Clear | | | (nm) | | Deg | Typ | Max | Min |
| PL11-CTR24 | PL11-WCR24 | Bright Red | GaP | 700 | | 2.1 | 3.0 | 5.5 | 9.2 |
| PL11-CTR12 | PL11-WCR12 | Hi Eff Red | GaAsP on GaP | 635 | | 2.1 | 3.0 | 31.8 | 52.8 |
| PL11-CTG13 | PL11-WCG13 | Green | GaP | 567 | | 2.1 | 3.0 | 27.2 | 45.2 |
| PL11-CTY01 | PL11-WCY01 | Yellow | GaAsP on GaP | 585 | | 2.1 | 3.0 | 22.6 | 37.5 |
| PL11-CTA02 | PL11-WCA02 | Amber | GaAsP on GaP | 610 | | 2.1 | 3.0 | 31.8 | 52.8 |
| PL11-CTO12 | PL11-WCO12 | Orange | GaAsP on GaP | 635 | | 2.1 | 3.0 | 31.8 | 52.8 |

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.
An Epoxy Meniscus may extend about 1 mm. down the leads.



PL11 Series 5 Volt 4mm (T1 3/4) LED

Features

*Available in Color, White Diffused (WD), Color Transparent (CT), and Water Clear (WC)
*Available with Integrated Current Limiting Resistor for 12V operation

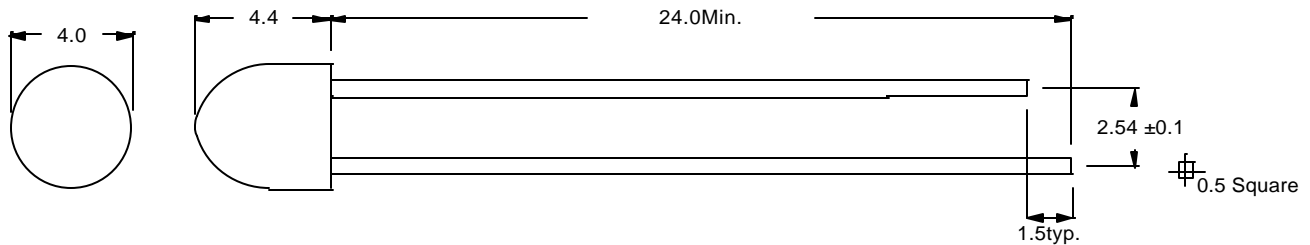
Absolute Maximum Ratings at T_A = 25 °C

| | |
|--|--------------------|
| Reverse Voltage (<100µA)..... | 5.0V |
| Max Forward Current..... | 30mA |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)..... | 100mA |
| Operating Temperature Range..... | -25°C to + 85°C |
| Storage Temperature Range..... | -25°C to +100°C |
| Soldering Temperature (1.6mm below body)..... | 260° for 5 seconds |

Electrical & Optical Characteristics at T_A = 25 °C

| Part Number | | Emitting Color | Material | Peak Wave Length | View Angle 2θ ½ | Forward Voltage @20mA (V) | | Luminous Intensity @20mA (mcd) | |
|-------------------|----------------|----------------|--------------|------------------|-----------------|---------------------------|-----|--------------------------------|------|
| | | | | | | Typ | Max | Min | Typ |
| Color Diffused | White Diffused | | | (nm) | Deg | Typ | Max | Min | Typ |
| PL11-CDR24-5V | PL11-WDR24-5V | Bright Red | GaP | 700 | 42° | 5.0 | 7.0 | 4.4 | 7.4 |
| PL11-CDR12-5V | PL11-WDR12-5V | Hi Eff Red | GaAsP on GaP | 635 | | 5.0 | 7.0 | 13.4 | 22.2 |
| PL11-CDG13-5V | PL11-WDG13-5V | Green | GaP | 567 | | 5.0 | 7.0 | 11.6 | 19.3 |
| PL11-CDY01-5V | PL11-WDY01-5V | Yellow | GaAsP on GaP | 585 | | 5.0 | 7.0 | 9.4 | 15.7 |
| PL11-CDA02-5V | PL11-WDA02-5V | Amber | GaAsP on GaP | 610 | | 5.0 | 7.0 | 13.4 | 22.2 |
| PL11-CDO12-5V | PL11-WDO12-5V | Orange | GaAsP on GaP | 635 | | 5.0 | 7.0 | 13.4 | 22.2 |
| Color Transparent | Water Clear | | | (nm) | | Deg | Typ | Max | Min |
| PL11-CTR24-5V | PL11-WCR24-5V | Bright Red | GaP | 700 | | 5.0 | 7.0 | 5.5 | 9.2 |
| PL11-CTR12-5V | PL11-WCR12-5V | Hi Eff Red | GaAsP on GaP | 635 | | 5.0 | 7.0 | 31.8 | 52.8 |
| PL11-CTG13-5V | PL11-WCG13-5V | Green | GaP | 567 | | 5.0 | 7.0 | 27.2 | 45.2 |
| PL11-CTY01-5V | PL11-WCY01-5V | Yellow | GaAsP on GaP | 585 | | 5.0 | 7.0 | 22.6 | 37.5 |
| PL11-CTA02-5V | PL11-WCA02-5V | Amber | GaAsP on GaP | 610 | | 5.0 | 7.0 | 31.8 | 52.8 |
| PL11-CTO12-5V | PL11-WCO12-5V | Orange | GaAsP on GaP | 635 | | 5.0 | 7.0 | 31.8 | 52.8 |

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.
An Epoxy Meniscus may extend about 1 mm. down the leads.



PL11 Series 12 Volt 4mm (T1 3/4) LED

Features

- *Available in Color, White Diffused (WD), Color Transparent (CT), and Water Clear (WC)
- *Standard and Low Current Available
- *Available with Integrated Current Limiting Resistor for 5V operation

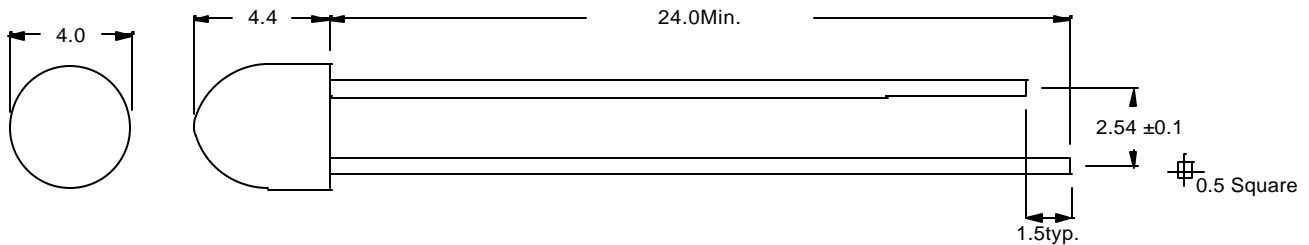
Absolute Maximum Ratings at T_A = 25 °C

| | |
|--|--------------------|
| Reverse Voltage (<100µA)..... | 5.0V |
| Max Forward Current..... | 30mA |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)..... | 100mA |
| Operating Temperature Range | -25°C to + 85°C |
| Storage Temperature Range..... | -25°C to +100°C |
| Soldering Temperature (1.6mm below body)..... | 260° for 5 seconds |

Electrical & Optical Characteristics at T_A = 25 °C

| Part Number | | Emitting Color | Material | Peak Wave Length | View Angle 2θ ½ | Forward Voltage @20mA (V) | | Luminous Intensity @20mA (mcd) | |
|-------------------|----------------|----------------|--------------|------------------|-----------------|---------------------------|------|--------------------------------|------|
| | | | | | | Typ | Max | Min | Typ |
| Color Diffused | White Diffused | | | (nm) | Deg | Typ | Max | Min | Typ |
| PL11-CDR24-12V | PL11-WDR24-12V | Bright Red | GaP | 700 | 42° | 12.0 | 15.0 | 4.4 | 7.4 |
| PL11-CDR12-12V | PL11-WDR12-12V | Hi Eff Red | GaAsP on GaP | 635 | | 12.0 | 15.0 | 13.4 | 22.2 |
| PL11-CDG13-12V | PL11-WDG13-12V | Green | GaP | 567 | | 12.0 | 15.0 | 11.6 | 19.3 |
| PL11-CDY01-12V | PL11-WDY01-12V | Yellow | GaAsP on GaP | 585 | | 12.0 | 15.0 | 9.4 | 15.7 |
| PL11-CDA02-12V | PL11-WDA02-12V | Amber | GaAsP on GaP | 610 | | 12.0 | 15.0 | 13.4 | 22.2 |
| PL11-CDO12-12V | PL11-WDO12-12V | Orange | GaAsP on GaP | 635 | | 12.0 | 15.0 | 13.4 | 22.2 |
| Color Transparent | Water Clear | | | (nm) | | Deg | Typ | Max | Min |
| PL11-CTR24-12V | PL11-WCR24-12V | Bright Red | GaP | 700 | | 12.0 | 15.0 | 5.5 | 9.2 |
| PL11-CTR12-12V | PL11-WCR12-12V | Hi Eff Red | GaAsP on GaP | 635 | | 12.0 | 15.0 | 31.8 | 52.8 |
| PL11-CTG13-12V | PL11-WCG13-12V | Green | GaP | 567 | | 12.0 | 15.0 | 27.2 | 45.2 |
| PL11-CTY01-12V | PL11-WCY01-12V | Yellow | GaAsP on GaP | 585 | | 12.0 | 15.0 | 22.6 | 37.5 |
| PL11-CTA02-12V | PL11-WCA02-12V | Amber | GaAsP on GaP | 610 | | 12.0 | 15.0 | 31.8 | 52.8 |
| PL11-CTO12-12V | PL11-WCO12-12V | Orange | GaAsP on GaP | 635 | | 12.0 | 15.0 | 31.8 | 52.8 |

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.
An Epoxy Meniscus may extend about 1 mm. down the leads.



PL11 Series Low Current 4mm (T1 3/4) LED

Features

*Available in Color, White Diffused (WD), Color Transparent (CT), and Water Clear (WC)

Absolute Maximum Ratings at T_A = 25 °C

| | |
|--|--------------------|
| Reverse Voltage (<100µA)..... | 5.0V |
| Max Forward Current..... | 30mA |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)..... | 100mA |
| Operating Temperature Range..... | -25°C to + 85°C |
| Storage Temperature Range..... | -25°C to +100°C |
| Soldering Temperature (1.6mm below body)..... | 260° for 5 seconds |

Electrical & Optical Characteristics at T_A = 25 °C

| Part Number | | Emitting Color | Material | Peak Wave Length | View Angle 2θ ½ | Forward Voltage @2mA (V) | | Luminous Intensity @2mA (mcd) | |
|-------------------|----------------|----------------|--------------|------------------|-----------------|--------------------------|-----|-------------------------------|-----|
| Color Diffused | White Diffused | | | (nm) | Deg | Typ | Max | Min | Typ |
| PL11-CDR12-LC | PL11-WDR12-LC | Hi Eff Red | GaAsP on GaP | 635 | 42° | 1.8 | 2.2 | 1.5 | 2.5 |
| PL11-CDG13-LC | PL11-WDG13-LC | Green | GaP | 567 | | 1.8 | 2.2 | 1.3 | 2.2 |
| PL11-CDY01-LC | PL11-WDY01-LC | Yellow | GaAsP on GaP | 585 | | 1.8 | 2.2 | 1.0 | 1.8 |
| PL11-CDO12-LC | PL11-WDO12-LC | Orange | GaAsP on GaP | 635 | | 1.8 | 2.2 | 1.5 | 2.5 |
| Color Transparent | Water Clear | | | (nm) | Deg | Typ | Max | Min | Typ |
| PL11-CTR12-LC | PL11-WCR12-LC | Hi Eff Red | GaAsP on GaP | 635 | | 1.8 | 2.2 | 3.5 | 5.9 |
| PL11-CTG13-LC | PL11-WCG13-LC | Green | GaP | 567 | | 1.8 | 2.2 | 3.0 | 5.0 |
| PL11-CTY01-LC | PL11-WCY01-LC | Yellow | GaAsP on GaP | 585 | | 1.8 | 2.2 | 2.5 | 4.2 |
| PL11-CTO12-LC | PL11-WCO12-LC | Orange | GaAsP on GaP | 635 | | 1.8 | 2.2 | 3.5 | 5.9 |

Package Dimensions are in **Millimeters**. Tolerance is ± 0.25mm unless otherwise specified.
An Epoxy Meniscus may extend about 1 mm. down the leads.

