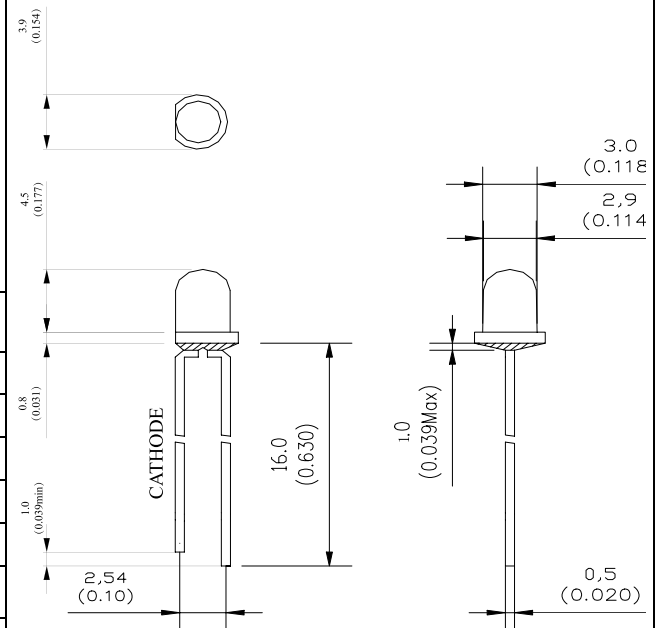


## GNL-3012PD (Φ 3mm Photodiode) Black Lens packaged

ABSOLUTE MAXIMUM RATING:(Ta=25°C)

| Parameter  |     |     | Unit |
|--|-----|-----|------|
| DC Forward Current                                     | 30  |     | mA   |
| Reverse Voltage  | 5   |     | V    |
| Reverse Current (Vr=5V)                                | 10  |     | μA   |
| Peak Forward Current ,tw ,=1 msec Duty ,=1/20          | 150 |     | mA   |
| Operation Temperature                                  | -25 | +80 | °C   |
| Storage Temperature                                    | -40 | +85 | °C   |
| Solder Dip Temperature<br>(5 seconds,1.6mm from body ) | 300 | ±5  | °C   |



| Parameter                      | Symbol          | Condition  | Min.  | Typ.     | Max.  | Units |
|--------------------------------|-----------------|--|-------|----------|-------|-------|
| Rang of Spectral Bandwidth     | $\lambda_{0.5}$ | _____  | _____ | 840-1200 | _____ | nm    |
| Wavelength of Peak Sensitivity | $\lambda_p$     | _____  | _____ | 980      | _____ | nm    |
| Open-Circuit Voltage           | Voc             | Ee=5m W/cm2<br>$\lambda_p = 940\text{nm}$          | _____ | 0.42     | _____ | V     |
| Short-Circuit Current          | Isc             | Ee=5m W/cm2<br>$\lambda_p = 940\text{nm}$          | 30    | 2        | _____ | μ A   |
| Reverse Light Current          | IL              | Ee=5m W/cm2<br>$\lambda_p = 940\text{nm}$<br>VR=5V | 30    | 2        | _____ |       |
| Dark Current                   | ID              | Ee=0 W/cm2<br>VR=10V                               | 5     | 10       | _____ | nA    |
| Reverse Breakdown              | BVR             | Ee=0 W/cm2<br>IR=100 μ A                           | 32    | 170      | _____ | V     |
| Total Capacitance              | Ct              | Ee=0 W/cm2<br>VR=3V F=1MHZ                         | _____ | 5        | _____ | pF    |
| Rise/Fall Time                 | T / t f         | VR=10V<br>RL=1K Ω                                  | _____ | 6/6      | _____ | ns    |