



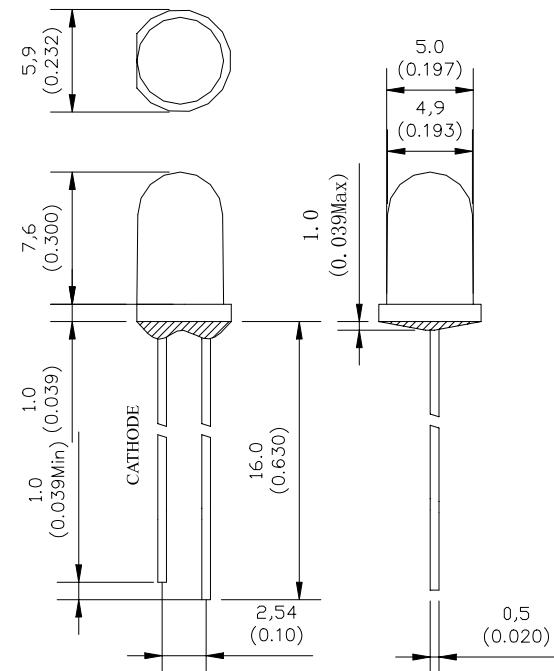
## GNL-5012PD

(Φ 5mm 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 (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/cm <sup>2</sup> $\lambda_p$ =940nm	—	0.42	—	V
Short-Circuit Current	Isc	Ee=5m W/cm <sup>2</sup> $\lambda_p$ =940nm	—	2	—	$\mu$ A
Reverse Light Current	IL	Ee=5m W/cm <sup>2</sup> $\lambda_p$ =940nm VR=5V	—	2	—	$\mu$ A
Dark Current	ID	Ee=0 W/cm <sup>2</sup> VR=10V	—	10	—	nA
Reverse Breakdown	BVR	Ee=0 W/cm <sup>2</sup> IR=100 $\mu$ A	32	170	—	V
Total Capacitance	Ct	Ee=0 W/cm <sup>2</sup> VR=3V F=1MHZ	—	5	—	pF
Rise/Fall Time	T/t <sub>f</sub>	VR=10V RL=1K $\Omega$	—	6/6	—	ns