



### END-LOOK PACKAGE PHOTO DIODE

#### ● Features

1. Wide receiving angle.
2. Linear response vs.irradiance.
3. Fast switching time.
4. End-looking Package ideal for space Limited applications
5. Lens Appearance:Black
6. Radiant sensitive area  $A=1.6\text{m}^2$
7. This product doesn't contain restriction substance, comply ROHS standard

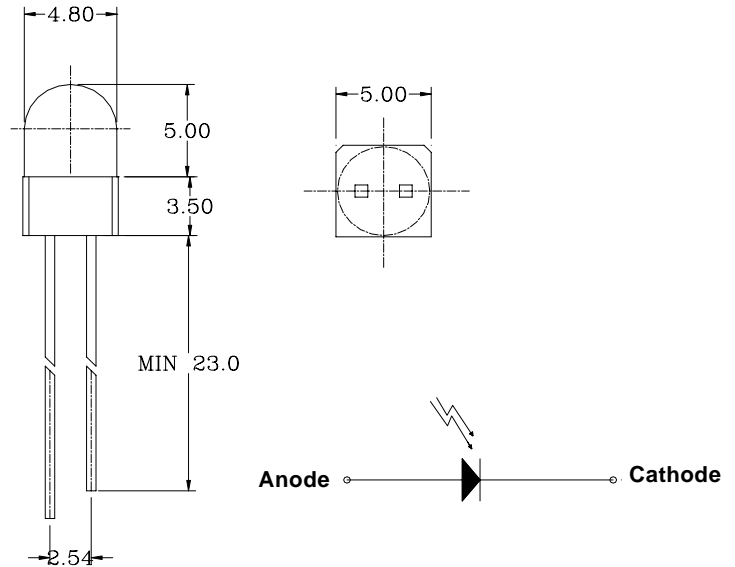
#### ● Description

The HL-004YD05-QB device consists Of a PIN silicon photodiode molded in a black epoxy package which allows spectral response infrared light wavelengths. The wide receiving angle provides relatively even reception over a large area. The end-looking package is designed for easy PC board mounting. This photodiode is mechanically and spectrally matched to Prowlight's GaAs and GaAlAs series of infrared Emitting diodes.

#### ● Absolute Maximum Ratings(Ta=25°C)

Parameter	Maximum Rating	Unit
Power Dissipation	100	mW
Reverse Breakdown Voltage	60V	
Operating Temperature	-40°C~+85°C	
Storage Temperature Range	-45°C~+100°C	
Lead Soldering Temperature	260°C for 5 seconds	

#### ● Package Dimensions:



#### NOTES:

- 1.All dimensions are in millimeters (inches).
- 2.Tolerance is  $\pm 0.25\text{mm}$  (0.01') unless otherwise specified.
- 3.Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.



● **Electrical Characteristics (TA=25°C unless otherwise noted)**

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Reverse light Curre	$I_L$	-	75		$\mu A$	$V_R=5V$ . $E_e=1mW/cm^2$
Reverse Dark Current	$I_D$	-	-	30	nA	$V_R=10V$ . $E_e=0 mW/cm^2$
Reverse Breat down Voltage	$V_{(BR)}$	30	-	-	-	$I_R=100 \mu A$
Forward Voltage	$V_F$	-	-	1.2	V	$I_F=1mA$
Total Capacitance	$C_T$	-	9	-	PF	$V_{cc}=5V$ . $E_E=0$ , $f=1.0MHZ$
Rise Time/Fall Time	tr/tf	-	50	-	ns	$V_R=20V$ . $\lambda =940nm$ . $RL=50 \Omega$

● **Typical Optical-Electrical Characteristic Curves**

