END- LOOK PACKAGE PIN PHOTO DIODE

Features

1. Linear response vs. irradiance
2. Fast switching time
3. End-looking Package ideal for space Limited applications
4. Lens Appearance: Black
5. This product doesn't contain restriction Substance, comply RoHS standard

Description

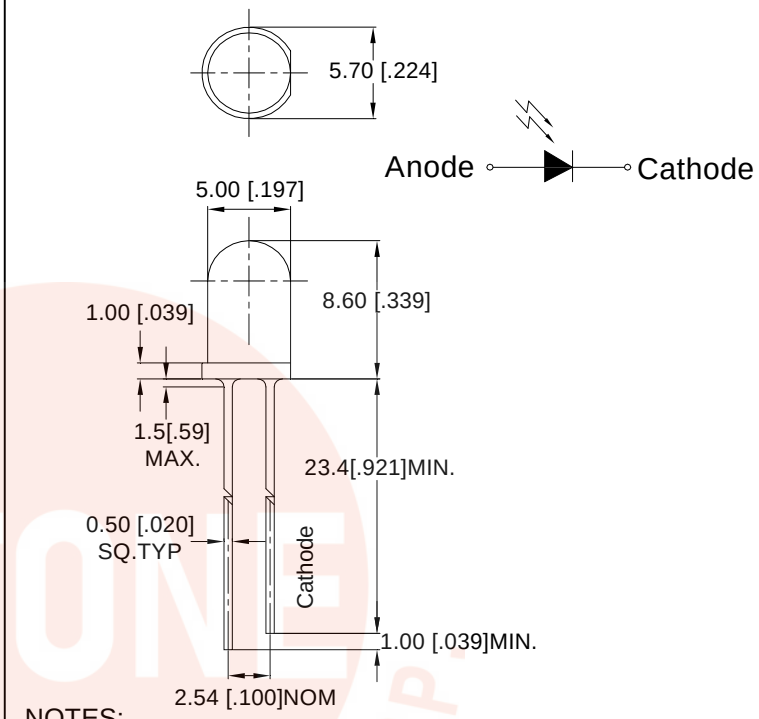
The BPD-BQB934 device consists of a PIN silicon photodiode molded in a black epoxy package which allows spectral response infrared light wavelengths.

The wide receiving angleprovides relatively even reception over a large area.

The side-looking package is designed for easy PC board mounting.

This photodiode is mechanically and spectrally matched to BRIGHT's GaAs and GaAlAs series of infrared emitting diodes.

●Package Dimensions:



NOTES:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm (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

Absolute Maximum Ratings(Ta=25℃)

Parameter	Maximum Rating	Unit
Dissipation	100	mW
Reverse Breakdown Voltage	60V	
Operating Temperature	-40℃~+85℃	
Storage Temperature Range	-45℃~+85℃	

I Electrical Characteristics (Ta=25℃ unless otherwise noted)

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Reverse Light Current	I_L	-	40	-	μA	V_R=5V.Ee=1mW/cm^2
Reverse Dark Current	I_D	-	-	100	nA	V_R=10V.Ee=0 mW/cm^2
Reverse Break down Voltage	$V_{(BR)}$	35	-	-	V	I_R=100μA
Forward Voltage	V_F	-	-	1.3	V	I_F=10mA
Spectral range of sensitivity	λ10%	750	940	1100	nm	
Wavelength of max sensitivity	λp		940		nm	
Total Capacitance	C_T	-	5	-	PF	V_R=5V.Ee=0,f=1.0MHZ
Rise Time/ Fall Time	tr/tf	-	10	-	ns	V_R=20V,λ=940nm.RL=50Ω
Angle of sensitivity	$2\theta_{1/2}$	-	20	-	deg	

I Typical Optical-Electrical Characteristic Curves

Fig1. Relative Response vs. Wavelength

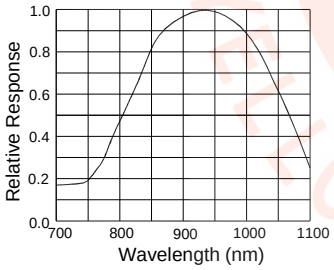


Fig2.Coupling Characteristics

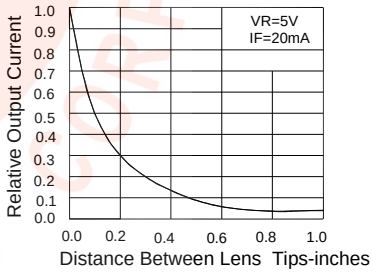


Fig3.Normalized Light Current vs Reverse Voltage

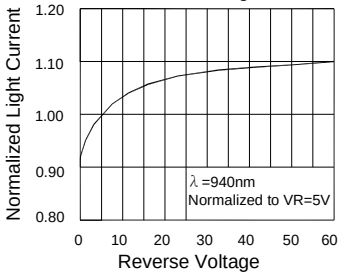


Fig4.Total Capacitance vs Reverse Voltage

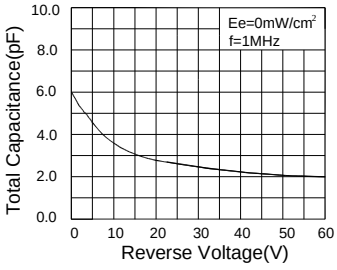


Fig5.Normalized Light Current vs Ambient Temperture

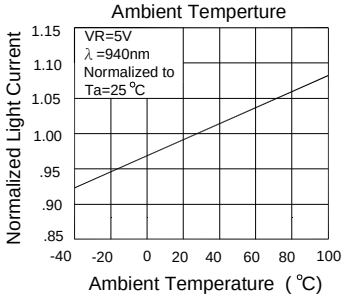


Fig6.Light Current vslrradiance

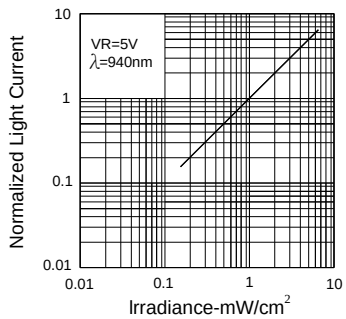
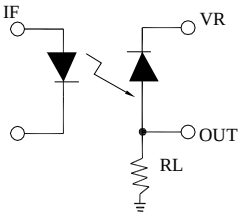
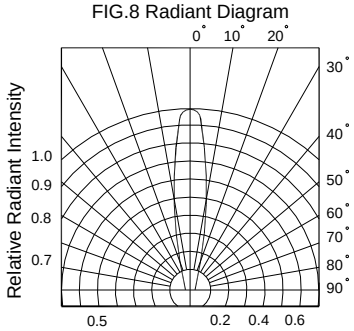


Fig7.Switching Time Test Circuit

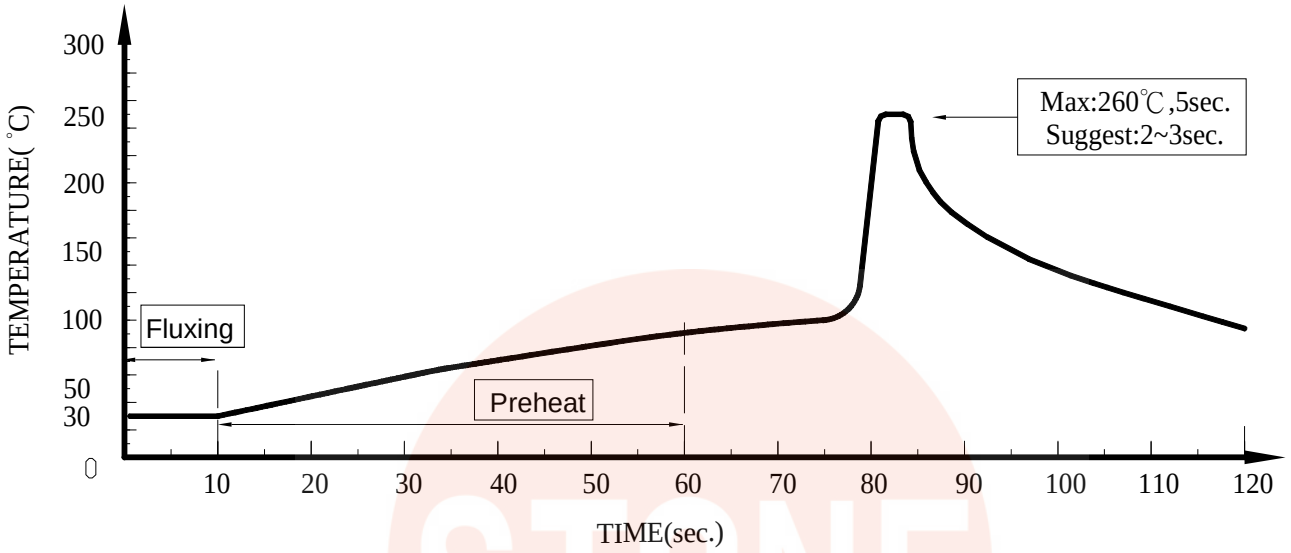


Note:
See Above For tr/tf Conditions

FIG.8 Radiant Diagram



● Dip Soldering

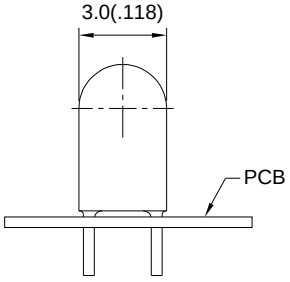


1. Please avoid any external stress applied to the lead-frames and epoxy while the LEDs are at high temperature, especially during soldering
2. DIP soldering and hand soldering should not be done more than one time.
3. After soldering, avoid the epoxy lens from mechanical shock or vibration until the LEDs are back to room temperature.
4. Avoid rapid cooling during temperature ramp-down process
5. Although the soldering condition is recommended above, soldering at the lowest possible temperature is feasible for the LEDs

● IRON Soldering

A：Max：350℃ Within 3 sec. One time only.

B：The products of 3mm without flange, welding condition of flat plate PCB Max：350℃ Within 2 sec. One time only



Infrared Emitting Diode Specification

˜ Commodity: Phototransistor.

˜ Collector Current Bin Limits (V_R=5V.Ee=1mW/cm^2)

BIN CODE	Min.(uA)	Max.(uA)
Y	25.6	30.8
Z	30.8	36.9
1	36.9	44.3
2	44.3	53.2
3	53.2	64.0

NOTES: Tolerance of measurement of Radiant Intensity :±15%