

## SIDE- LOOK PACKAGE PIN PHOTO DIODE

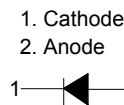
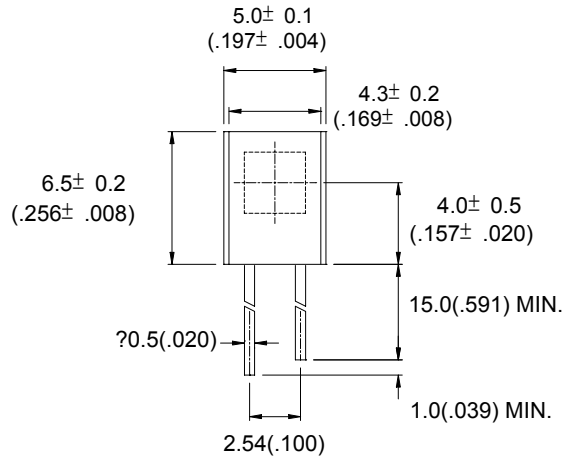
### ● Features

1. Wide receiving angle
2. Linear response vs. irradiance
3. Fast switching time
4. Side-looking Package ideal for space limited applications
5. Lens Appearance: Black

### ● Description

The BPD-RQ09DY-A 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 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  $\pm 0.25\text{mm}$  (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

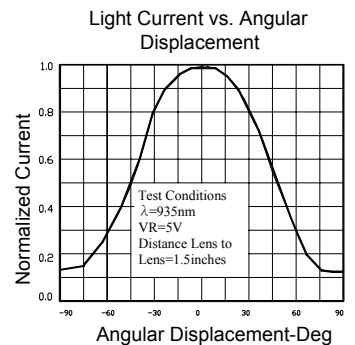
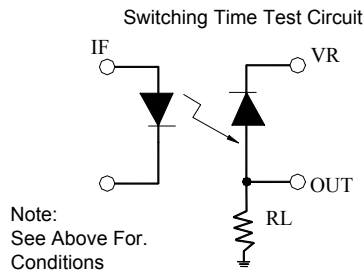
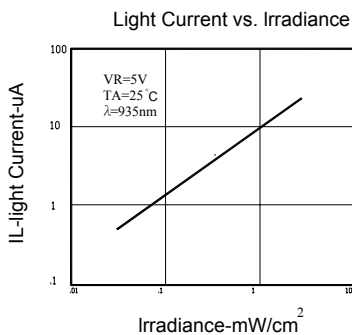
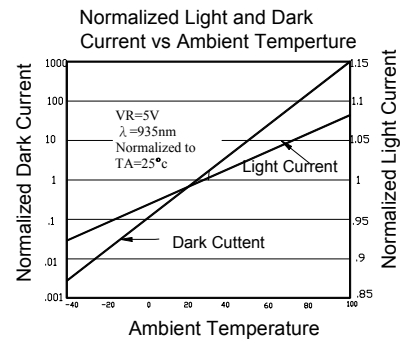
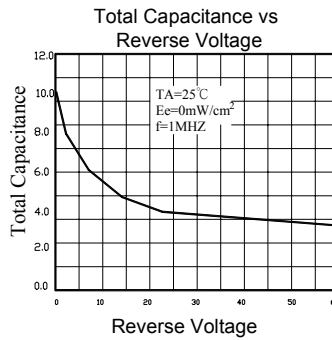
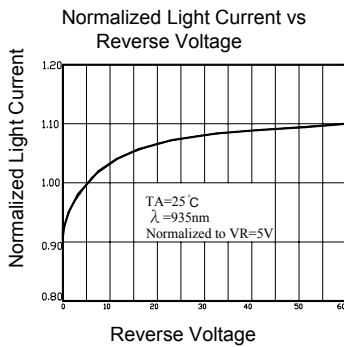
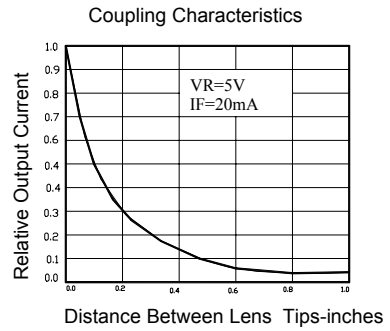
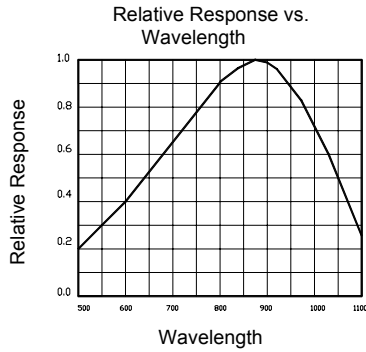
### ● Absolute Maximum Ratings(Ta=25°C)

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

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

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Reverse Light Current	$I_L$	-	12	-	$\mu\text{A}$	$V_R=5\text{V}, E_e=5\text{mW}/\text{cm}^2$
Reverse Dark Current	$I_D$	-	-	30	nA	$V_R=30\text{V}, E_e=0$
Reverse Break down Voltage	$V_{(BR)}$	30	-	-	V	$I_R=100\mu\text{A}$
Forward Voltage	$V_F$	-	-	1.2	V	$I_F=1\text{mA}$
Total Capacitance	$C_T$	-	25	-	PF	$V_R=20\text{V}, E_e=0, f=1.0\text{MHZ}$
Rise Time/ Fall Time	tr/tf	-	50	-	ns	$V_R=20\text{V}, \lambda=940\text{nm}, R_L=50\Omega$

● **Typical Optical-Electrical Characteristic Curves**





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## Photo Diode Specification

- **Commodity: Photo diode**
- **Light Current Bin Limits (Vr=5V)**

BIN CODE	Min.(uA)	Max.( uA)
A	5.5	18.5
B	16.5	22.5
C	20.5	43.5

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