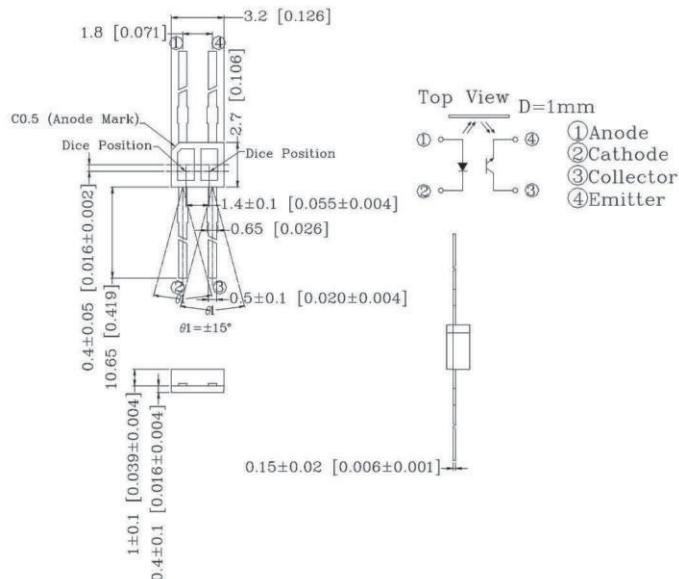




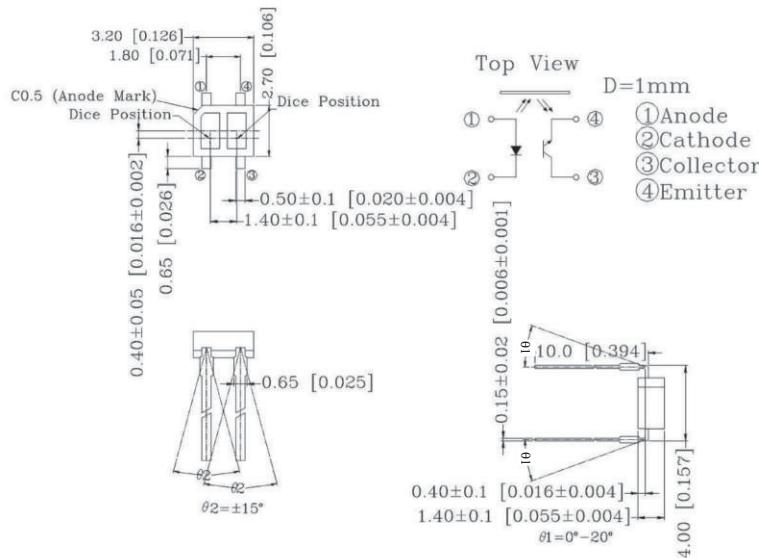
Photo Interrupters Mini Reflective Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{k}\Omega$
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Tolerance: ± 0.25

BPR-105	Max.1.5V	Max.100uA	Max.200nA	Max.0.4V	Min.80uA	Typ.20/20
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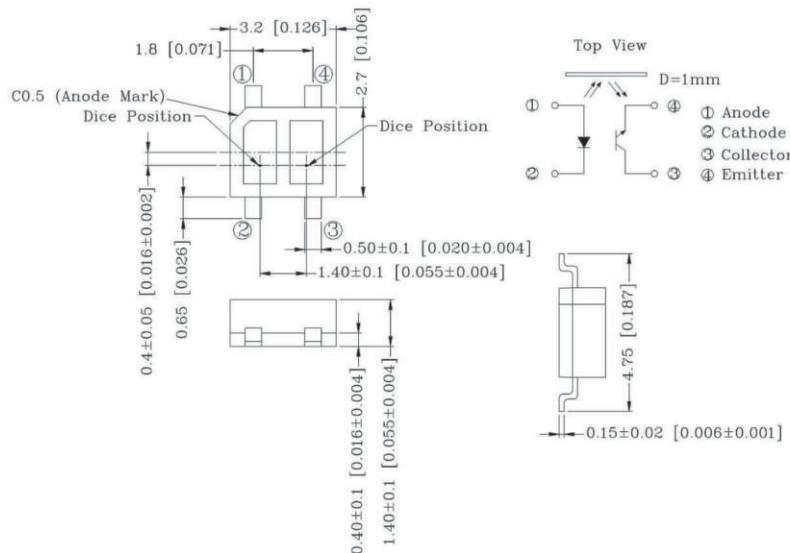
Tolerance: ± 0.25

BPR-105F	Max.1.5V	Max.100uA	Max.200nA	Max.0.4V	Min.80uA	Typ.20/20
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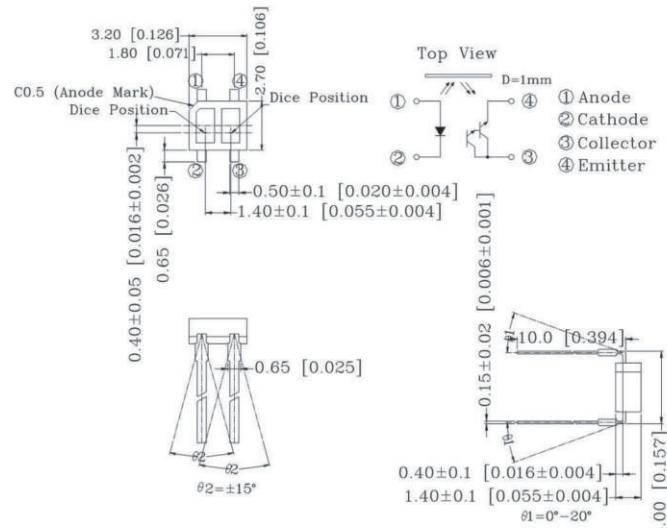
Photo Interrupters Mini Reflective Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_c=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$ $D=1\text{mm}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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Tolerance: ± 0.25

BPR-105S*	Max.1.5V	Max.100uA	Max.200nA	Max.0.4V	Min.80uA	Typ.20/20
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Tolerance: ± 0.25

BPR-205F	Max.1.5V	Max.100uA	Max.200nA	Max.0.4V	Min.500uA @ $I_F=5\text{mA}$	Typ.20/20
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* Preliminary Drawings

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Photo Interrupters Reflective Type

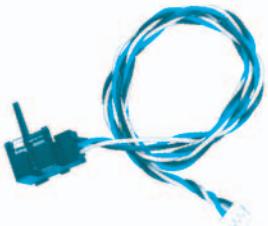
Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_c=0.25\text{mA}$ $I_F=20\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=20\text{mA}$ $D=3.81\text{mm}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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	<p>Top View D=3.81mm ① Anode ② Cathode ③ Emitter ④ Collector</p>	Tolerance: ± 0.25					
BPR-301	Max.1.5V	Max.100uA	Max.200nA	Max.0.4V	Min.160uA	Typ.20/20	



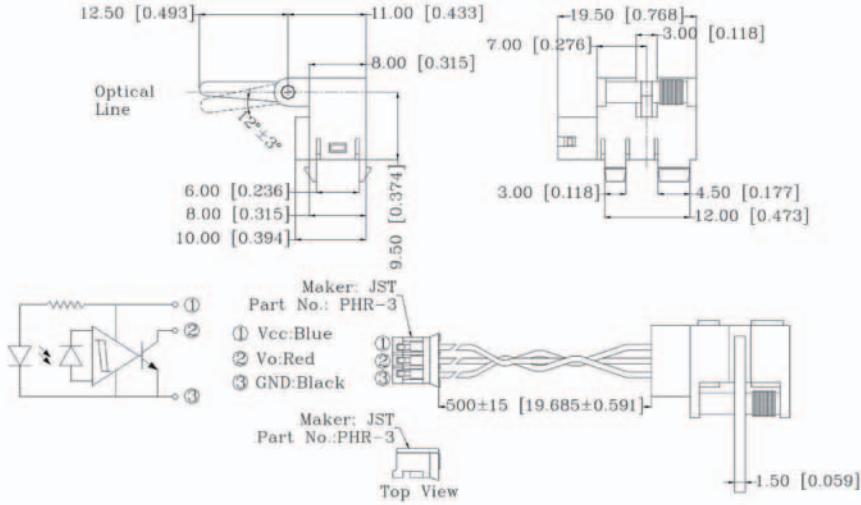
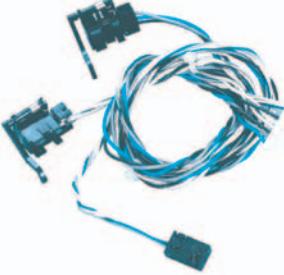
Photo Interrupters Actuator Type (Opic)

Part No.	Package (mm [Inch])	V_{OL} @Light beam interrupted $I_{OL}=16mA$	V_{OH} @Light beam interrupted $R_L=47K$	I_{CCH} @Light beam interrupted
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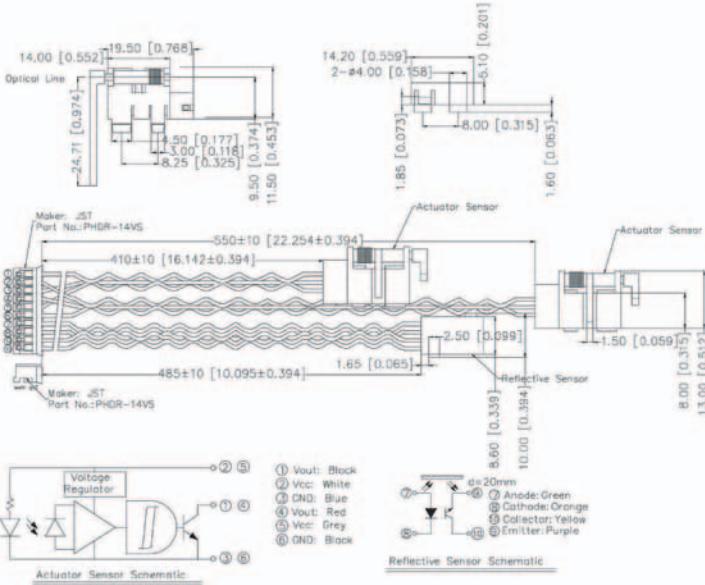
				Top View
BPI-3C2A-03W1*		Max.0.35V	Min. $V_{ccx}0.9V$	Max.30mA

Tolerance: ± 0.25

				Top View
BPI-3C2A-05W2*		Max.0.35V	Min. $V_{ccx}0.9V$	Max.30mA

Tolerance: ± 0.25



* Preliminary Drawings

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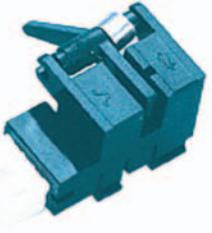
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Photo Interrupters Actuator Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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BPI-3C1-26C1		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

Diagram showing the internal structure and pinout of the BPI-3C1-26C1 photointerrupter. The component is a three-pin actuator type with a red LED at the top emitting light through a lens towards a photo diode. The pins are labeled: ① COLLECTOR, ② GND, and ③ ANODE. The package dimensions are: height 19.5 (0.768), width 14.0 (0.551), and depth 12.5 (0.492). Pin 1 is at the top, pin 2 is at the bottom, and pin 3 is on the right. The internal assembly shows the LED and photo diode with their respective dimensions and mounting details.

Tolerance: ± 0.25



BPI-3C1-26W1		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

Diagram showing the internal structure and pinout of the BPI-3C1-26W1 photointerrupter. The component is a three-pin actuator type with a red LED at the top emitting light through a lens towards a photo diode. The pins are labeled: ① COLLECTOR : RED, ② GND : BLACK, and ③ ANODE : BLUE. The package dimensions are: height 19.5 (0.768), width 14.0 (0.551), and depth 12.5 (0.492). Pin 1 is at the top, pin 2 is at the bottom, and pin 3 is on the right. The internal assembly shows the LED and photo diode with their respective dimensions and mounting details.

Tolerance: ± 0.25

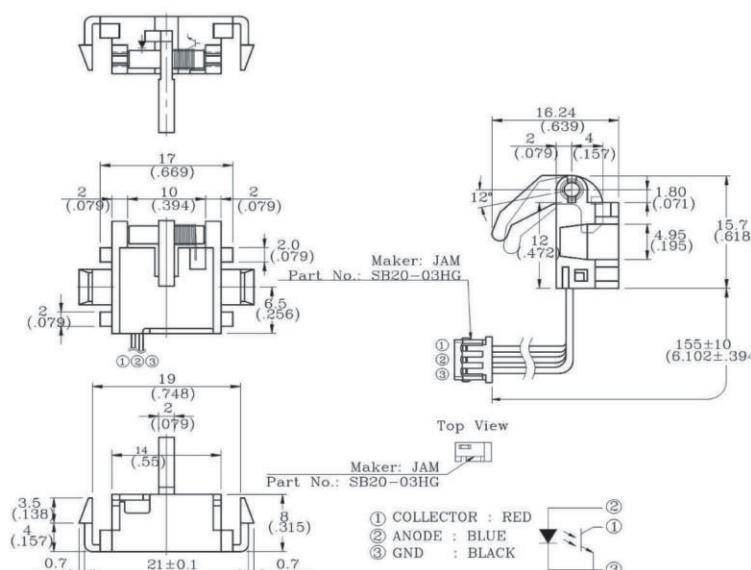


Photo Interrupters Actuator Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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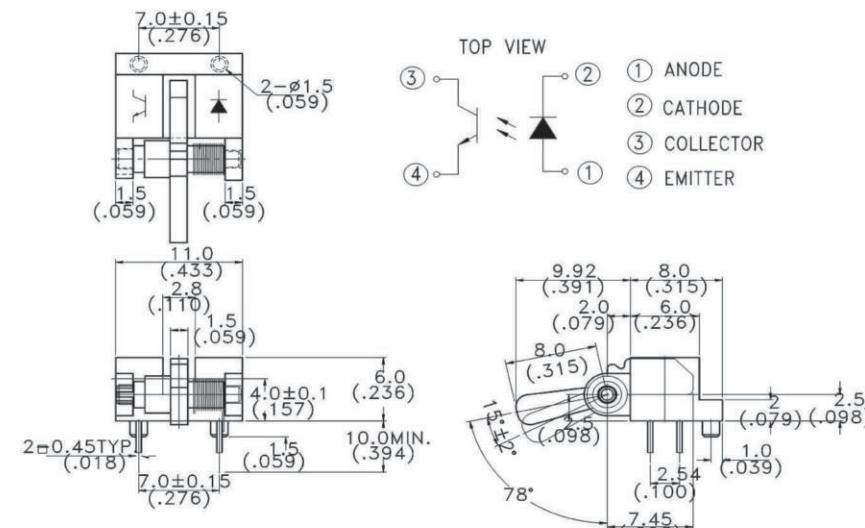
BPI-3C2-07W1		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Tolerance: ± 0.25



BPI-3C2-08		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Tolerance: ± 0.25



Photo Interrupters Actuator Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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	<p>The technical drawing includes two views: a front view and a top view. The front view shows the physical dimensions of the actuator type photointerrupter, including height (9.50 [0.374]), width (19.50 [0.768]), and various internal and external features like the optical line and mounting holes. The top view shows the pinout for the JST connectors, labeled PHR-3. Pin 1 (GND:Black) is at the bottom, Pin 2 (Vo:Red) is the middle-left, and Pin 3 (Vcc:Blue) is the middle-right. A tolerance of ±0.25 is indicated.</p>						
	BPI-3C2-10W1	Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Photo Interrupters Slotted Type (0pic)

Part No.	Package (mm [Inch])	V_{OL} @Light beam interrupted $I_{OL}=16mA$	V_{OH} @Light beam interrupted $R_L=47K$	I_{CCH} @Light beam interrupted
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		<p>Maker: Japan AMP Part No.: 175487-3 Reference</p> <p>Optical Line</p> <p>Cathode</p> <p>Anode</p> <p>R_L</p> <p>V_{cc}</p> <p>V_o</p> <p>GND</p> <p>PCB</p> <p>Dimensions: 17.00 [0.670], 15.00 [0.591], 5.00 [0.197], 2.49 [0.098], 12.60 [0.496], 7.50 [0.296], 6.00 [0.236], 3.60 [0.142], 0.50 [0.020]</p> <p>Symbol: \oplus V_{cc}, \ominus V_o, \ominus GND</p>		
BPI-3C2A-01C1		Max.0.35V	Min.V _{ccx} 0.9V	Max.30mA

		<p>Maker: JST Header Part No.: S5B-PH-KL</p> <p>Dimensions: 19.00 [0.749], 5.00 [0.197], 19.40 [0.764], 14.40 [0.567], 9.40 [0.370], 43.50 [0.532], 14.00 [0.432], 9.20 [0.362], 0.80 [0.032], 5.85 [0.230], 7.45 [0.294]</p> <p>Symbol: \oplus V_{cc}, \ominus V_{out,1}, \ominus V_{out,2}, \ominus GND, \ominus GND</p>		
BPI-3C2A-02C1*		Max.0.35V	Min.V _{ccx} 0.9V	Max.30mA

* Preliminary Drawings

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Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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	<p>Top View</p> <p>Optical Line</p> <p>Tolerance: ± 0.25</p>	BPI-470-T51	Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

	<p>Top View</p> <p>Optical Line</p> <p>Tolerance: ± 0.25</p>	BPI-470-P51	Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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	<p>Top View</p> <ul style="list-style-type: none"> ① Anode ② Cathode ③ Collector ④ Emitter 	<p>Tolerance: ± 0.25</p>					
BPI-470-L51		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

	<p>Top View</p> <ul style="list-style-type: none"> ① Anode ② Cathode ③ Collector ④ Emitter 	<p>Tolerance: ± 0.25</p>					
BPI-470-N51		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

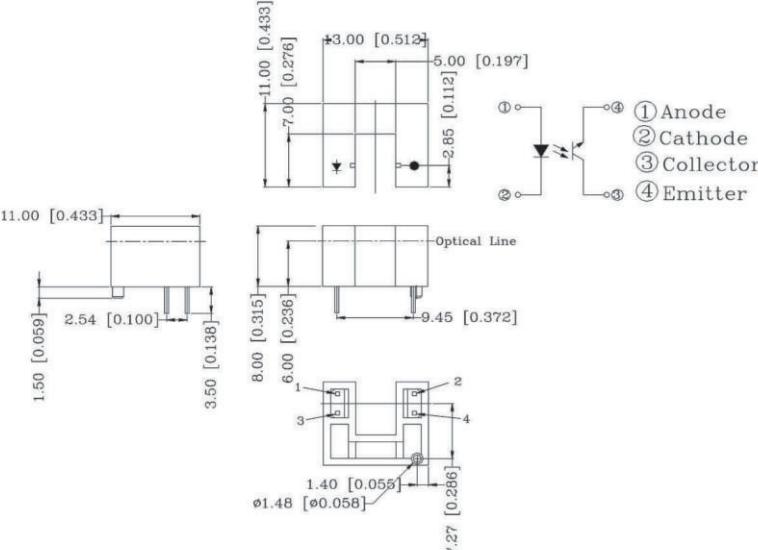


Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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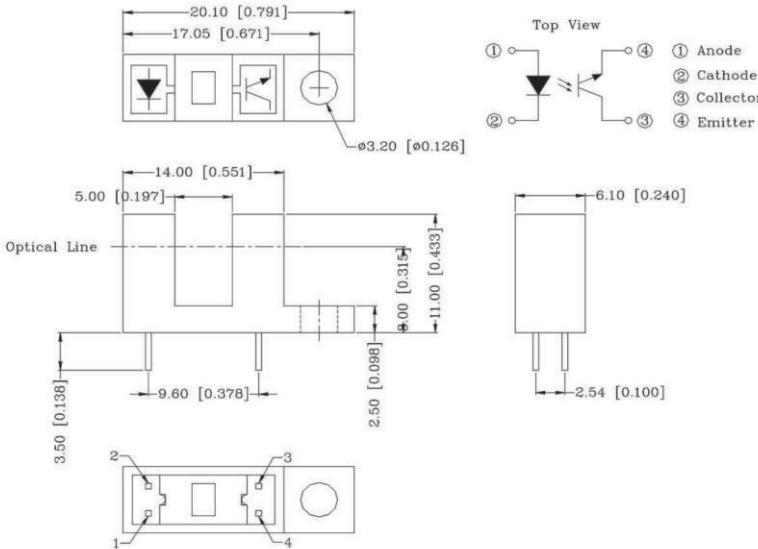
BPI-3C1-01		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Tolerance: ± 0.25



BPI-3C1-03		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Tolerance: ± 0.25



Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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		<p>Top View</p> <ul style="list-style-type: none"> ① Anode ② Cathode ③ Collector ④ Emitter 					
		Tolerance: ± 0.25					
BPI-3C1-05		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

		<p>Top View</p> <ul style="list-style-type: none"> ① Anode ② Cathode ③ Collector ④ Emitter 					
		Tolerance: ± 0.25					
BPI-3C1-06		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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		Tolerance: ± 0.25						
BPI-3C1-07	Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20		

		Tolerance: ± 0.25						
BPI-3C1-08	Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20		

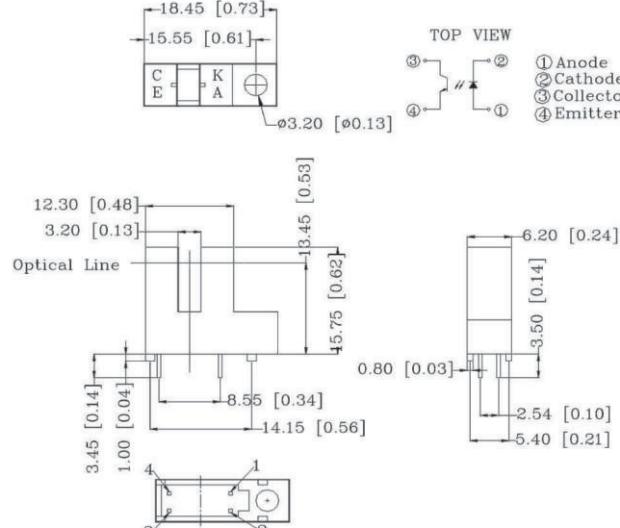


Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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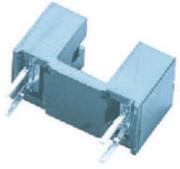
BPI-3C1-09		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



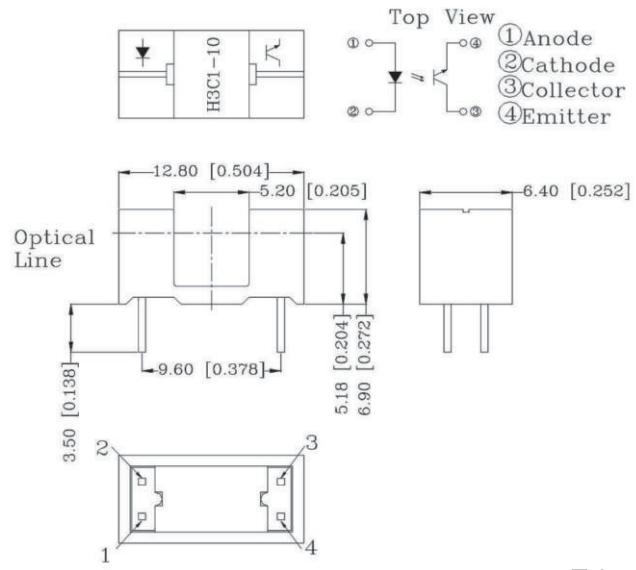
TOP VIEW

① Anode
② Cathode
③ Collector
④ Emitter

Tolerance: ± 0.25



BPI-3C1-10		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Top View

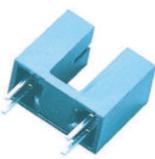
① Anode
② Cathode
③ Collector
④ Emitter

Tolerance: ± 0.25

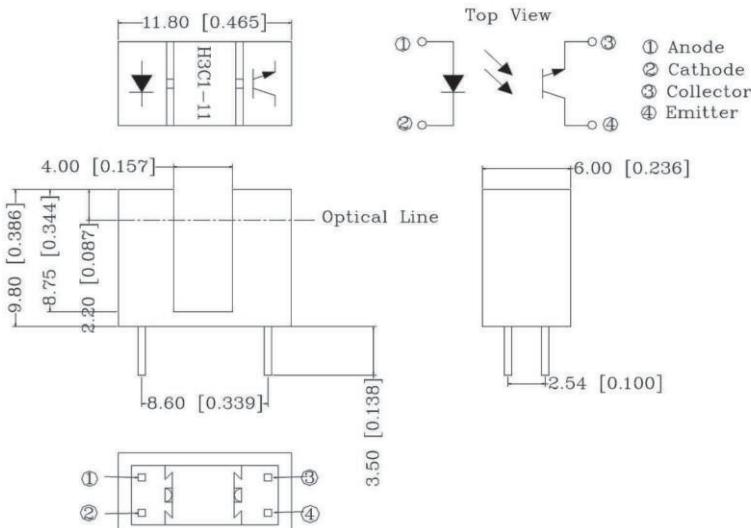


Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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BPI-3C1-11		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



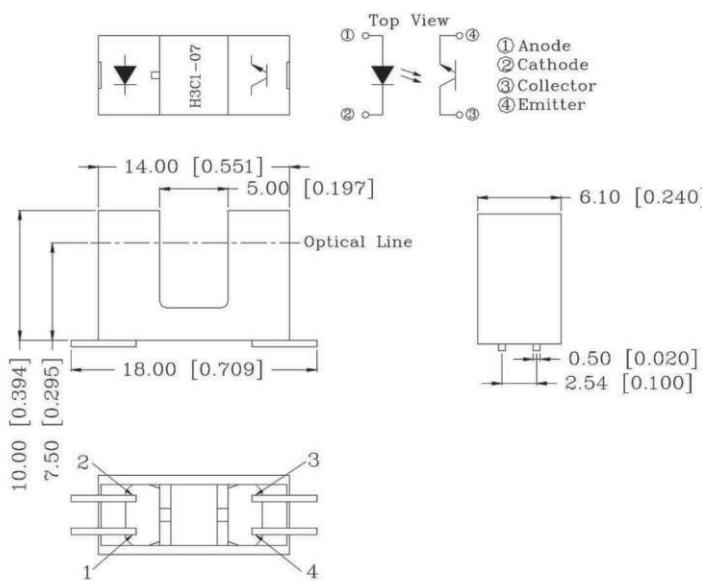
Top View

- ① Anode
- ② Cathode
- ③ Collector
- ④ Emitter

Tolerance: ± 0.25



BPI-3C1-12		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Top View

- ① Anode
- ② Cathode
- ③ Collector
- ④ Emitter

Tolerance: ± 0.25



Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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	<p style="text-align: center;">Tolerance: ± 0.25</p>	BPI-3C1-13	Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

	<p style="text-align: center;">Tolerance: ± 0.25</p>	BPI-3C1-18	Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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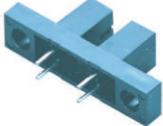
	<p>Top View</p> <ul style="list-style-type: none"> ① Anode ② Cathode ③ Collector ④ Emitter 	<p>Optical Line</p>					
		<p>Tolerance: ± 0.25</p>					
BPI-3C2-01		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

	<p>Top View</p> <ul style="list-style-type: none"> ① Anode ② Cathode ③ Collector ④ Emitter 	<p>Optical Line</p>					
		<p>Tolerance: ± 0.25</p>					
BPI-3C2-03		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20



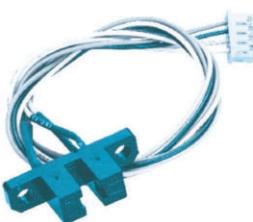
Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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BPI-3C2-05		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

Tolerance: ± 0.25



BPI-3C2-05W6		Max.1.5V	Max.100uA	Max.100nA	Max.0.4V	Min.0.5mA	Typ.20/20

Tolerance: ± 0.25

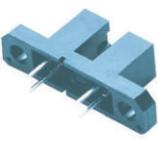


Photo Interrupters Slotted Type

Part No.	Package (mm [Inch])	V_F @ $I_F=20\text{mA}$	I_R @ $V_R=5\text{V}$	I_D @ $V_{CE}=10\text{V}$	$V_{CE(\text{sat})}$ @ $I_C=0.25\text{mA}$ $I_F=10\text{mA}$	I_L @ $V_{CE}=5\text{V}$ $I_F=10\text{mA}$	Tr/Tf @ $I_{FP}=20\text{mA}$ $V_{CE}=5\text{V}$ $R_L=1\text{K}$
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BPI-3C2-09		<p style="text-align: center;">Tolerance: ± 0.25</p>					
		Max. 1.5V	Max. 100uA	Max. 100nA	Max. 0.4V	Min. 0.5mA	Typ. 20/20



BPI-3C2-11		<p style="text-align: center;">Tolerance: ± 0.25</p>					
		Max. 1.5V	Max. 100uA	Max. 100nA	Max. 0.4V	Min. 0.5mA	Typ. 20/20