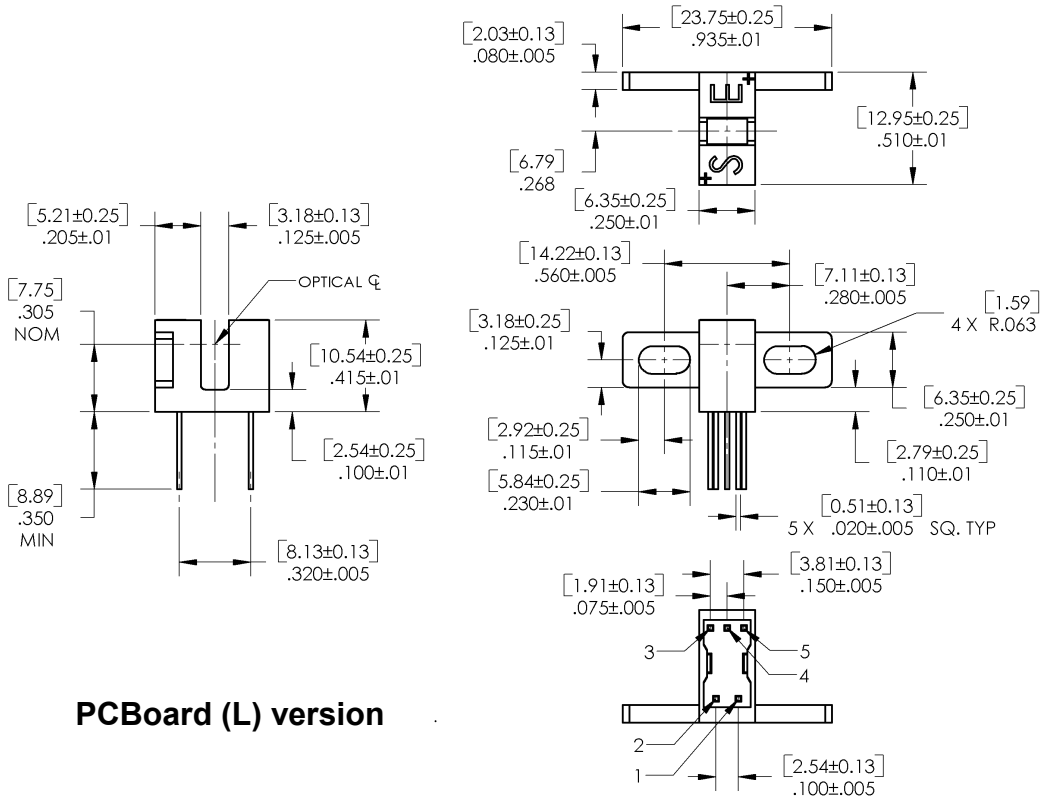
Photologic® Slotted Optical Switch

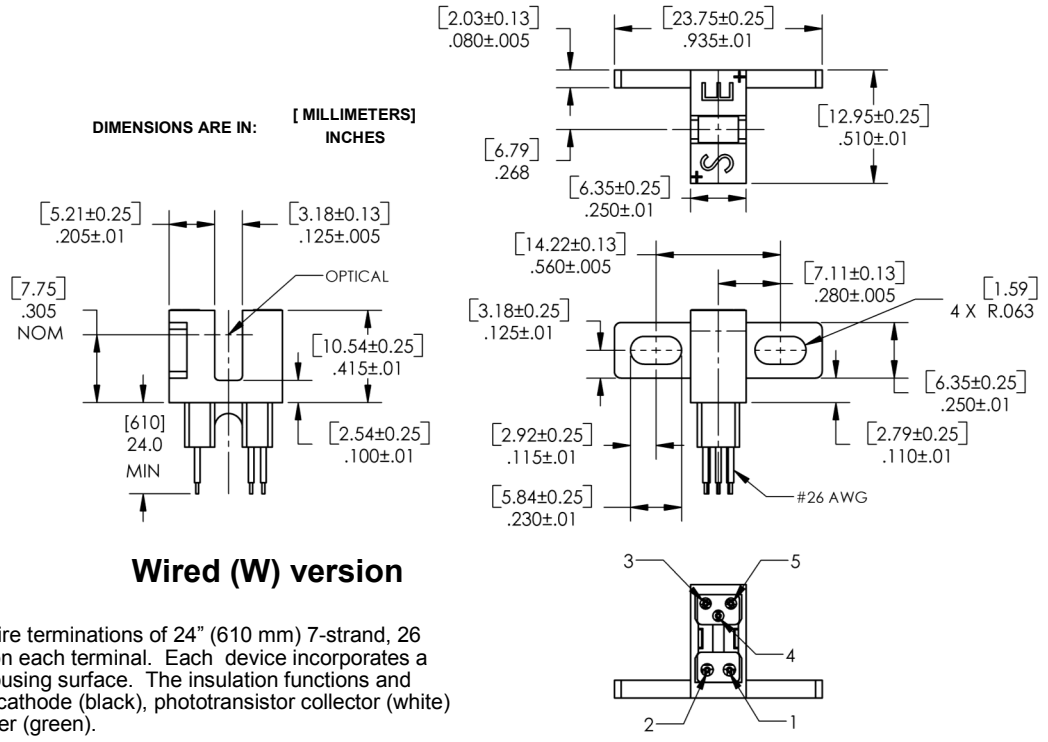
OPB930 and OPB940 (L and W Series)



Color- Pin #	Description
Red—1	Anode
Black—2	Cathode
White—3	V_{CC}
Blue—4	Output
Green—5	Ground

PCBoard (L) version

DIMENSIONS ARE IN: **[MILLIMETERS] INCHES**



Wired (W) version

The W Series includes wire terminations of 24" (610 mm) 7-strand, 26 AWG UL insulated wire on each terminal. Each device incorporates a wire strain relief at the housing surface. The insulation functions and colors are: anode (red), cathode (black), phototransistor collector (white) and phototransistor emitter (green).

General Note
TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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Electrical Characteristics (T_A = 25° C unless otherwise noted)						
SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Input Diode						
V_F	Forward Voltage	-	-	1.7	V	I_F = 20 mA
I_R	Reverse Current	-	-	100	µA	V_R = 2.0 V
Output Photologic® Sensor						
V_{CC}	Operating D.C. Supply Voltage	4.75	-	5.25	V	-
I_{CCL}	Low Level Supply Current: Totem Pole & Open-Collector	-	-	15	mA	V_{CC} = 5.25, I_F = 0 mA(1)
	Inverted Totem-Pole & Inverted Open-Collector	-	-	15	mA	V_{CC} = 5.25, I_F = 15 mA
I_{CCH}	High Level Supply Current: Totem Pole & Open-Collector	-	-	15	mA	V_{CC} = 5.25, I_F = 15 mA
	Inverted Totem-Pole & Inverted Open-Collector	-	-	15	mA	V_{CC} = 5.25, I_F = 0 mA(1)
V_{OL}	Low Level Output Voltage: Totem Pole & Open-Collector	-	-	0.4	V	V_{CC} = 4.75, I_{OL} = 12.8 mA, I_F = 0 mA (1)
	Inverted Totem-Pole & Inverted Open-Collector	-	-	0.4	V	V_{CC} = 4.75, I_{OL} = 12.8 mA, I_F = 15 mA
V_{OH}	High Level Output Voltage: Totem-Pole & Open-Collector	2.4	-	-	V	V_{CC} = 4.75, I_{OH} = -800 µA, I_F = 15 mA
	Inverted Totem-Pole & Inverted Open-Collector	2.4	-	-	V	V_{CC} = 4.75, I_{OH} = -800 µA, I_F = 0 mA (1)
I_{OH}	High Level Output Current: Totem Pole & Open-Collector	-	-	100	µA	V_{CC} = 4.75, V_{OH} = 30 V, I_F = 15 mA,
	Inverted Totem-Pole & Inverted Open-Collector	-	-	100	µA	V_{CC} = 4.75, V_{OH} = 30 V, I_F = 0 mA(1)
$I_F(+)$	LED Positive-Going Threshold Current	-	-	15	mA	V_{CC} = 5.0 V
$I_F(+)$, $I_F(-)$	Hysteresis	-	2.0	-	V	V_{CC} = 5.0 V
I_{OS}	Short Circuit Output Current: Totem Pole & Open-Collector	-15	-	-60	mA	V_{CC} = 5.25 V, I_F = 15 mA, Output = GND
	Inverted Totem-Pole & Inverted Open-Collector	-15	-	-60	mA	V_{CC} = 5.25 V, I_F = 0 mA(1), Output = GND

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