

Photologic® Slotted Optical Switch

OPB460, OPB470, OPB480, OPB490 Series



Absolute Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)	
Storage & Operating Temperature Range	-40°C to $+85^\circ\text{C}$
Lead Soldering Temperature [1/16 inch (1.6mm) from the case for 5 sec. with soldering iron] ⁽¹⁾	260°C
Input Infrared LED	
Supply Voltage, V_{CC} (not to exceed 3 seconds)	18 V
Diode Forward DC Current	40 mA
Diode Reverse DC Voltage	2 V
Input Diode Power Dissipation ⁽²⁾	75 mW
Output Photologic®	
Voltage at Output Lead (Open Collector Output)	25 V
Output Photologic® Power Dissipation ⁽³⁾	200 mW
Total Device Power Dissipation ⁽⁴⁾	
	275 mW

Notes:

- (1) RMA flux is recommended. Duration can be extended to 10 seconds maximum when flow soldering.
- (2) Derate linearly $1.67\text{ mW}/^\circ\text{C}$ above 25°C (OPB460, OPB470) or derate linearly $1.82\text{ mW}/^\circ\text{C}$ above 25°C (OPB480, OPB490).
- (3) Derate linearly $1.50\text{ mW}/^\circ\text{C}$ above 25°C (OPB460, OPB470) or derate linearly $1.64\text{ mW}/^\circ\text{C}$ above 25°C (OPB480, OPB490).
- (4) Derate linearly $3.17\text{ mW}/^\circ\text{C}$ above 25°C (OPB460, OPB470) or derate linearly $3.45\text{ mW}/^\circ\text{C}$ above 25°C (OPB480, OPB490).
- (5) The OPB460/OPB470 series are terminated with 0.020" square leads designed for printed circuit board mounting.
- (6) The OPB480/OPB490 series of switches are terminated with 24" (609.600 mm) of 7-strand 26 AWG, UL rated insulated wire on each terminal. Insulation colors and functions are: red (anode), black (cathode), white (V_{CC}), blue (output) and green (ground). Other wire lengths and/or colors in addition to customer selected connectors are available. Contact your local representative or call the factory.

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.

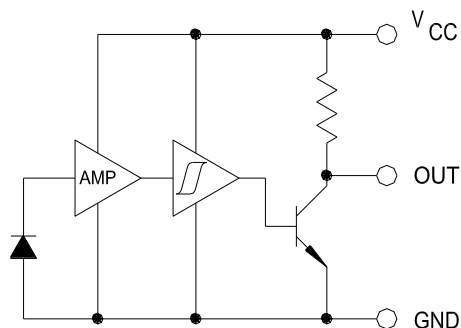
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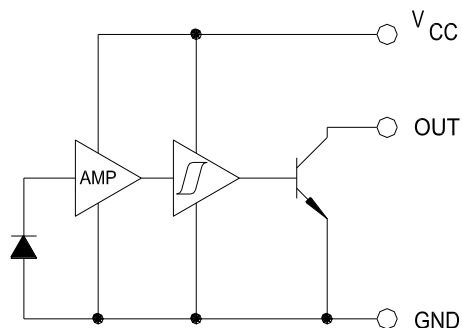
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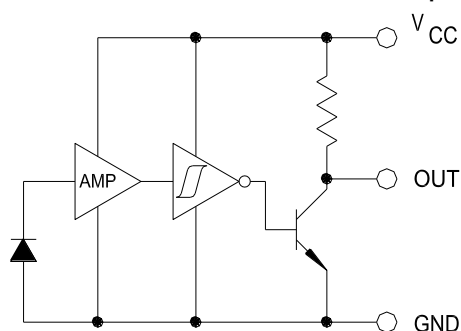
OPB460/470/480/490 Buffered 10K Pull-Up



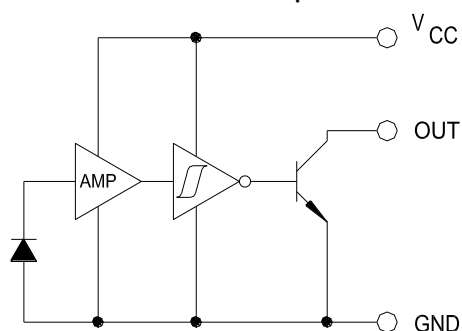
OPB461/471/481/491 Buffered Open-Collector



OPB462/472/482/492 Inverted 10K Pull-Up



OPB463/473/483/493 Inverted Open-Collector



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