

Optical Switch Series

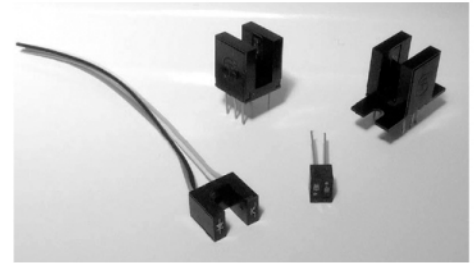
Transmissive and Reflective Photo-interrupters

Features

- Contactless Detection Capability
- Compact and Highly Reliable
- High Speed Response
- TTL Compatible
- Wire Contacts with OS-W200 Series

Applications

- Disk Rotation Detection
- Paper Feed Detection
- Smoke Detector (reflective)
- Proximity Detection (reflective)



Model Number	LED Forward Voltage V_f (Volt)	LED Reverse Breakdown Voltage V_{BR} (Volt)		Sensor Breakdown Voltage V_B (Volt)	Sensor Light Current I_L (μ A)	Sensor Dark Current I_o (nA)		Rise Time t_r (μ s)	Temp. Range ($^{\circ}$ C)		Package Style
	$I_p=50mA$	$BV_{R@IR}=10\mu A$		$I_c=100\mu A$	$I_p=50mA@0.4inch$	$I_f=0mA$	$V_{CE}=5V$	$V_{CC}=5V$	Operating	Storage	
	typ.	min.	typ.	typ.	typ.	typ.	max.	typ.			

Reflective Transducer

OS-P085	1.3	3.0	5.0	>50	100	10	100	150	-40 ~ +100	Plastic Molded
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Model Number	LED Forward Voltage V_f (Volt)	Sensor Saturation Voltage V_{sat} (Volt) $I_f=50mA$	Sensor Breakdown Voltage V_B (Volt)	Sensor Light Current I_L (mA)	Sensor Dark Current I_o (nA)	Rise Time t_r (μ s)	Temp. Range ($^{\circ}$ C)		Package Style
	$I_p=50mA$	$I_L=1.5mA$	$I_c=100\mu A$	$I_p=50mA$	$I_p=0mA$	$V_{CC}=5V$	Operating	Storage	
	typ.	typ.	typ.	typ.	typ.	typ.			

Optical Interrupter

OS-P190	1.5	0.85	>50	3	1.3	3(rise) 10(fall)	-40 ~ +85	Plastic Molded
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Model Number	LED Forward Voltage V_f (Volt)	Sensor Saturation Voltage V_{sat} (Volt) $I_f=35mA$	Sensor Breakdown Voltage V_B (Volt)	Sensor Light Current I_L (mA)	Sensor Dark Current I_o (nA)	Rise Time t_r (μ s)	Temp. Range ($^{\circ}$ C)		Package Style
	$I_p=20mA$	$V_{CC}=5V$ $R_L=10K\Omega$	$I_c=1mA$	$I_p=35mA$ $V_{CE}=5V$ $R_L=1K\Omega$	$I_p=0mA$	$V_{CE}=5V$	Operating	Storage	
	typ.	typ.	typ.	typ.	typ.	typ.			

'200' Series, Optical Interrupter

OS-W200A	1.2	0.12	>30	3.2	0.25	7.5(rise) 10(fall)	-40 ~ +85	Plastic Molded
OS-W200B	1.25	0.15		2.3	0.15	10.5(rise) 13(fall)		
OS-P200	1.35	0.18		2.5	0.16	12.5(rise) 14(fall)		Plastic Molded

- "OS" prefix stands for Optical Switch
- "P" or "W" denotes either Pin or Wire contacts.
- Number signifies the sensing gap distance as shown in the package schematics.
- Suffix (A, B..) differentiates electro-optical disparities.