

Wide Gap Slotted Optical Switch



Electrical Characteristics (T_A = 25°C unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
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Input Diode

V _F	Forward Voltage	-	-	1.7	V	I _F = 20 mA
I _R	Reverse Current	-	-	100	μA	V _R = 2 V

Output Phototransistor

V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	30	-	-	V	I _C = 1 mA
V _{(BR)ECO}	Emitter-Collector Breakdown Voltage	5	-	-	V	I _E = 100 μA
I _{CEO}	Collector-Emitter Dark Current	-	-	100	nA	V _{CE} = 10 V

Combined

V _{CE(SAT)}	Collector-Emitter Saturation Voltage					
	Parameter A (OPB800,OPB810)	-	-	0.4	V	I _C = 250 μA, I _F = 20 mA
	Parameter B (OPB801,OPB811)	-	-	0.4	V	I _C = 500 μA, I _F = 10 mA
	Parameter C (OPB802,OPB812)	-	-	0.6	V	I _C = 1800 μA, I _F = 20 mA
I _{C(ON)}	On-State Collector Current					
	Parameter A (OPB800,OPB810)	0.625	-	-	mA	V _{CE} = 10 V, I _F = 20 mA
	Parameter B (OPB801,OPB811)	1.25	-	-		V _{CE} = 5 V, I _F = 10 mA
Parameter C (OPB802,OPB812)	2.25	-	-	V _{CE} = 0.6 V, I _F = 20 mA		

Notes:

- (1) Derate linearly 1.67 mW/°C above 25°C.
- (2) RMA flux is recommended. Duration can be extended to 10 seconds maximum when flow soldering.
- (3) All parameters tested using pulse technique.
- (4) Methanol or isopropanol are recommended as cleaning agents. Plastic housing is soluble in chlorinated hydrocarbons and ketones.
- (5) 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

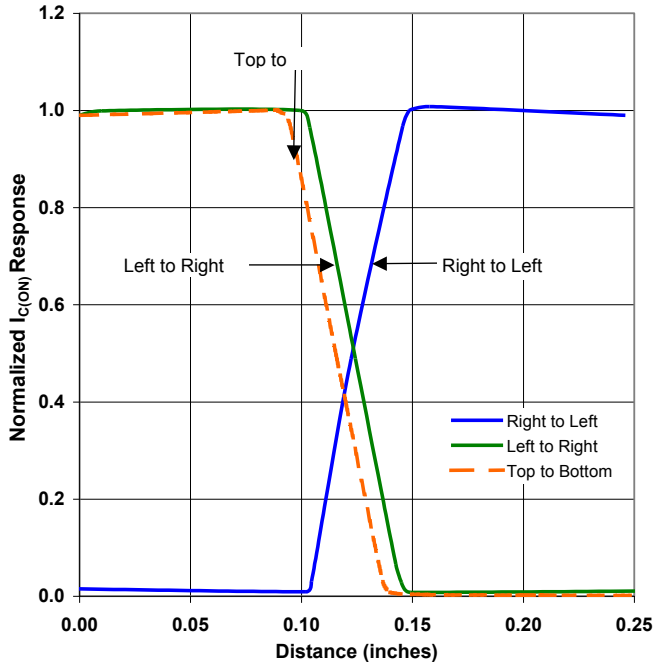
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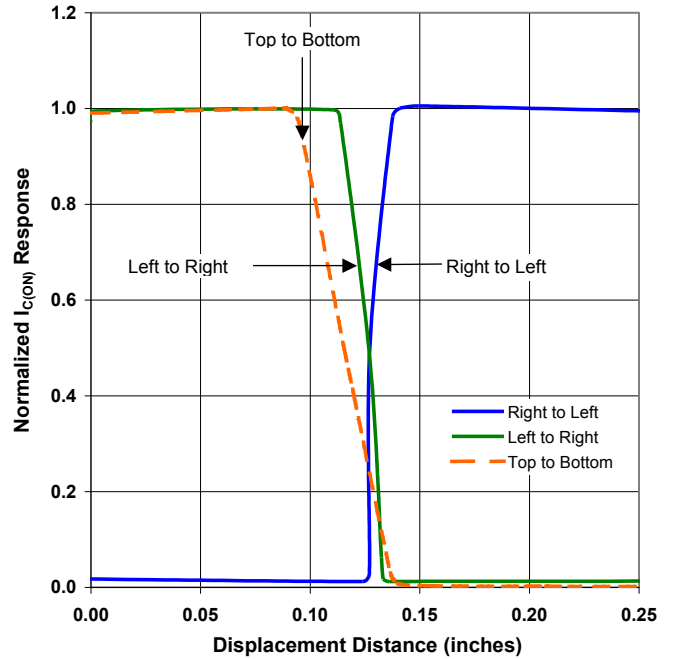
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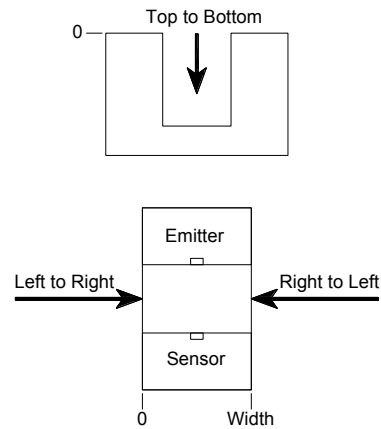
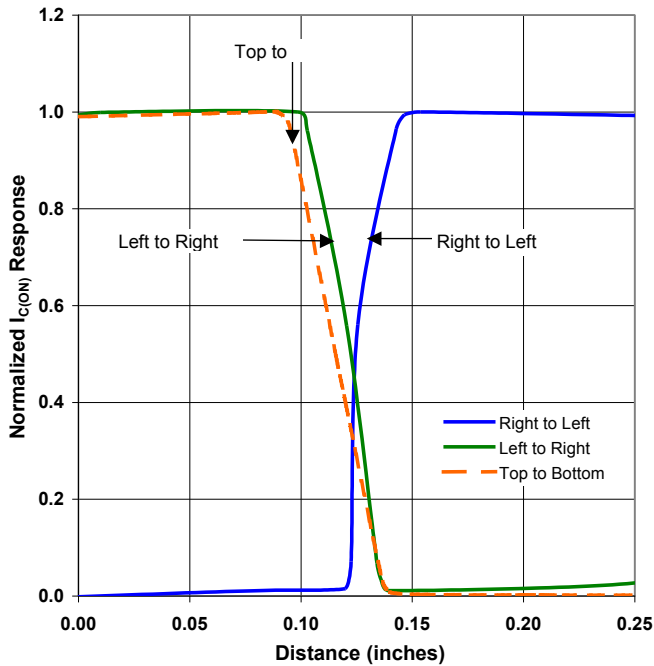
OPB800_51 - Flag Next to Emitter



OPB800_51 - Flag Next to Sensor



OPB800_51 - Flag in Middle of Slot



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