



# Deep Gap Slotted Switch with Wire and Connector Options

## OPB815L, OPB815WZ Series



### Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Storage & Operating Temperature Range	-40° C to +80° C
Lead Soldering Temperature [1/16 inch (1.6mm) from the case for 5 sec. with soldering iron]	260° C

### Input Infrared LED

Continuous Forward Current	50 mA
Reverse Voltage	2 V
Power Dissipation <sup>(2)</sup>	100 mW

### Output Phototransistor

Collector-Emitter Voltage	30 V
Emitter-Collector Voltage	5 V
Power Dissipation <sup>(2)</sup>	100 mW

### Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
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#### Input Infrared LED (see OP240 for additional information)

$V_F$	Forward Voltage	-	-	1.7	V	$I_F = 20 \text{ mA}$
$I_R$	Reverse Current	-	-	100	$\mu\text{A}$	$V_R = 2 \text{ V}$

#### Output Phototransistor (see OP550 for additional information)

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	30	-	-	V	$I_C = 1 \text{ mA}$
$V_{(BR)ECO}$	Emitter-Collector Breakdown Voltage	5	-	-	v	$I_E = 100 \mu\text{A}$
$I_{CEO}$	Collector-Emitter Dark Current	-	-	100	nA	$V_{CE} = 10 \text{ V}, I_F = 0, E_E = 0$

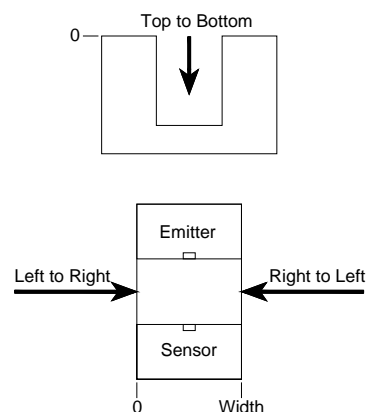
#### Coupled

$V_{CE(SAT)}$	Collector-Emitter Saturation Voltage	-	-	0.4	V	$I_C = 500 \mu\text{A}, I_F = 20 \text{ mA}$
$I_{C(ON)}$	On-State Collector Current	3.5	-	16	mA	$V_{CE} = 10 \text{ V}, I_F = 20 \text{ mA}$

#### Notes:

- (1) All wires are 26 AWG stranded, UL rated.
- (2) Derate linearly 1.67mW/°C above 25° C.
- (3) Methanol or isopropanol are recommended as cleaning agents. The plastic housing is soluble in chlorinated hydrocarbons and ketones.
- (4) All parameters tested using pulse techniques.

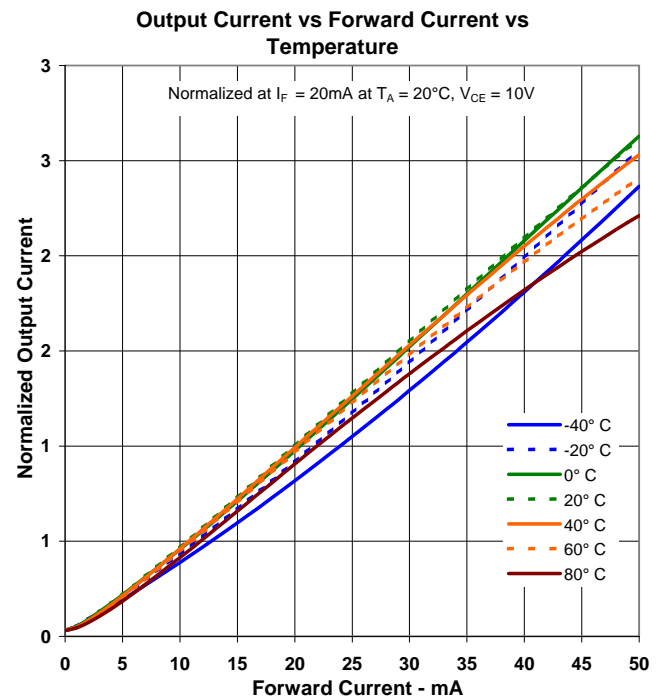
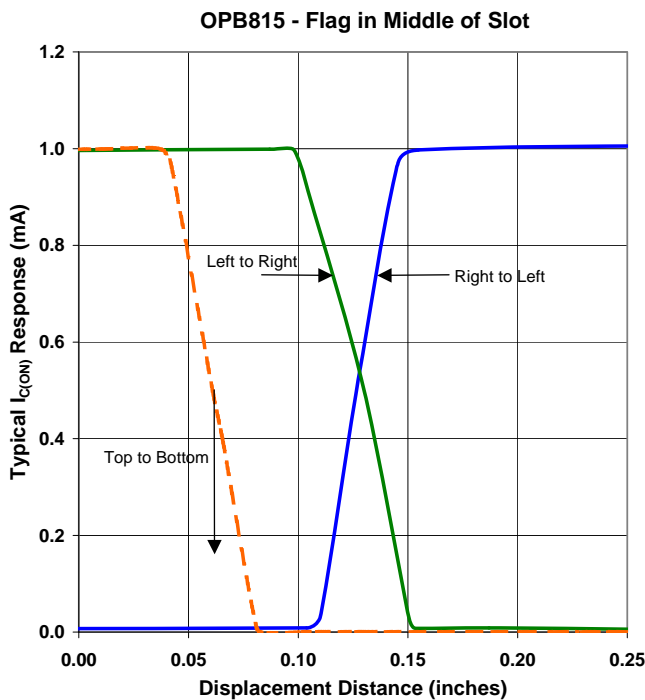
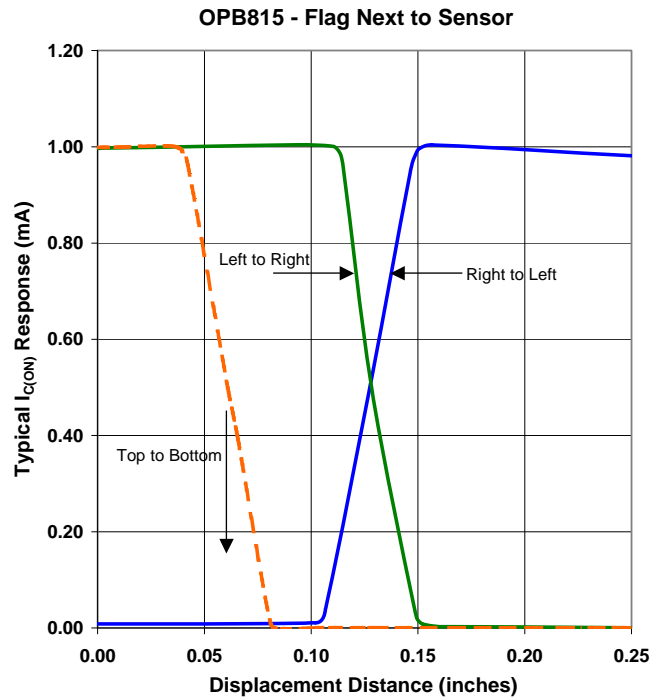
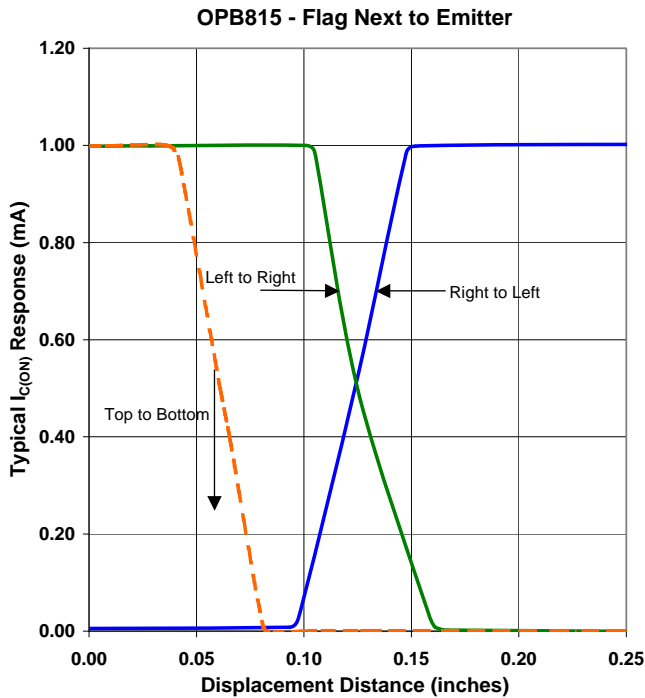
#### Test Diagram



OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

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Refer to Test Diagram on page 2 for definition of “Top to Bottom”, “Left to Right” and “Right to Left”

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