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 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	-	-		V_{CE} = 10 V, I_F = 20 mA
	Parameter B (OPB801,OPB811)	1.25	-	-	mA	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).

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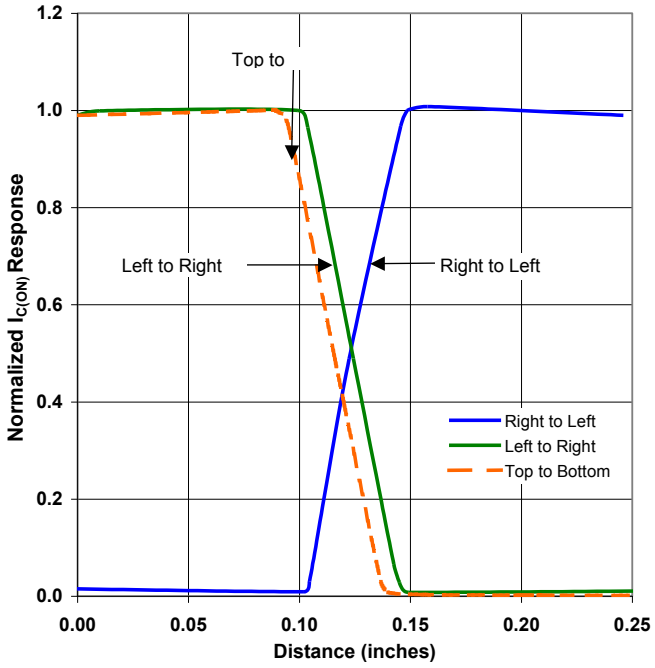
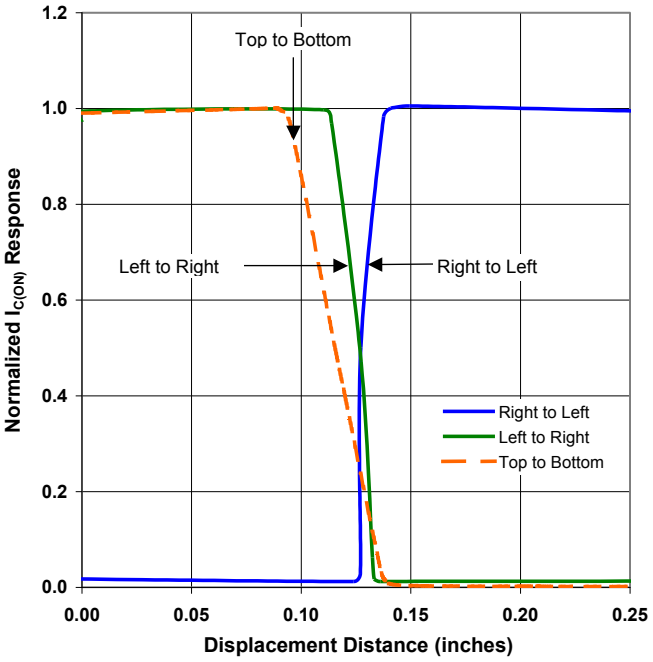
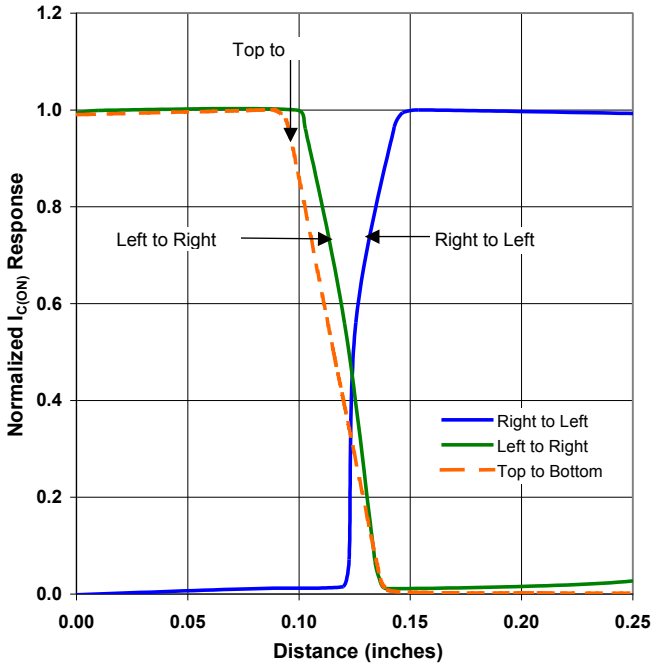
OPB800_51 - Flag Next to Emitter

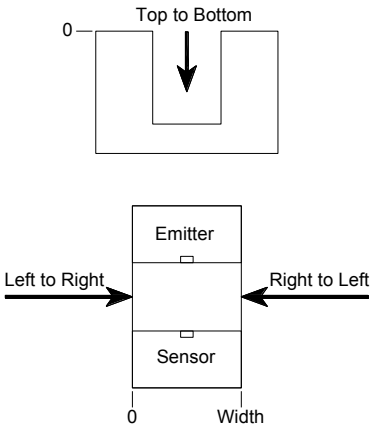


OPB800_51 - Flag Next to Sensor



OPB800_51 - Flag in Middle of Slot





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