

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

Storage & Operating Temperature Range	-40° C to +100° C
Lead Soldering Temperature [1/16 inch (1.6mm) from the case for 5 sec. with soldering iron] ⁽¹⁾	260° C

Input Diode

Forward DC Current	50 mA
Peak Forward Current (1 μs pulse width, 300 pps)	1 A
Reverse DC Voltage	3 V
Power Dissipation ⁽²⁾	100 mW

Output Phototransistor

Collector-Emitter Voltage	24 V
Collector DC Current	30 mA
Power Dissipation ⁽³⁾	200 mW

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
--------	-----------	-----	-----	-----	-------	-----------------

Input Diode

V_F	Forward Voltage	-	-	1.6	V	$I_F = 10 \text{ mA}$
I_R	Reverse Current	-	-	100	μA	$V_R = 3 \text{ V}$

Output Phototransistor

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	24	-	-	V	$I_{CE} = 100 \mu\text{A}$
BV_{ECO}	Emitter Reverse Breakdown Voltage	0.4	-	-	V	$I_{EC} = 100 \mu\text{A}$
I_{CEO}	Collector-Emitter Dark Current	-	-	100	μA	$V_{CE} = 5 \text{ V}$

Combined

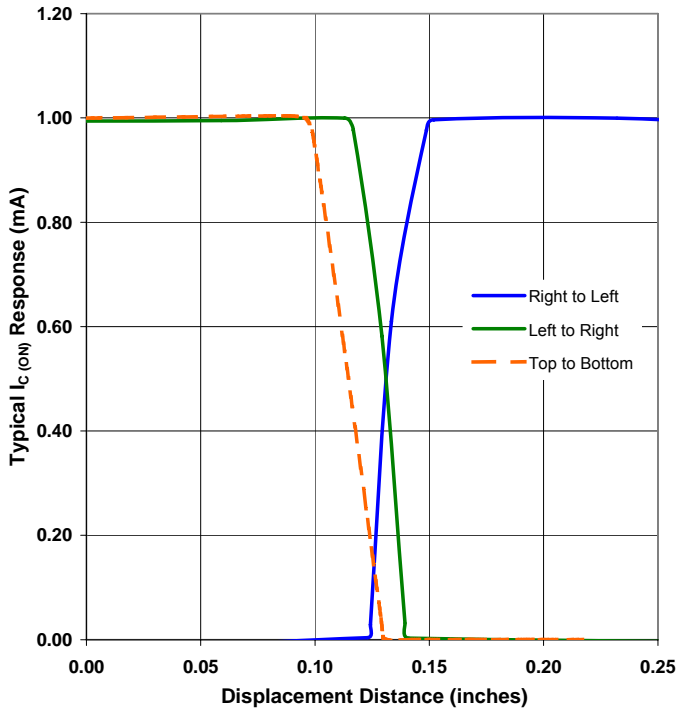
V_{SAT}	Collector-Emitter Saturation Voltage	-	-	0.4	V	$I_F = 10 \text{ mA}$, $I_C = 100 \mu\text{A}$, (gap unblocked)
$I_{C(ON)}$	On-State Collector Current	600	-	-	μA	$I_F = 10 \text{ mA}$, $V_{CE} = 5 \text{ V}$

Notes:

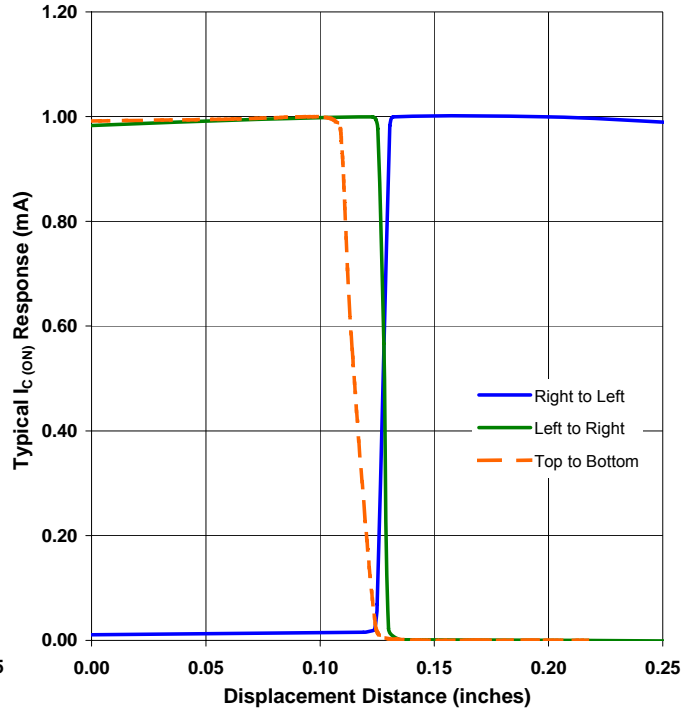
- (1) RMA flux is recommended. Duration can be extended to 10 seconds maximum when flow soldering. A maximum of 20 grams force may be applied to leads when soldering.
- (2) Derate linearly 1.33 mW/° C above 25° C.
- (3) Derate linearly 2.0 mW/° C above 25° C.

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

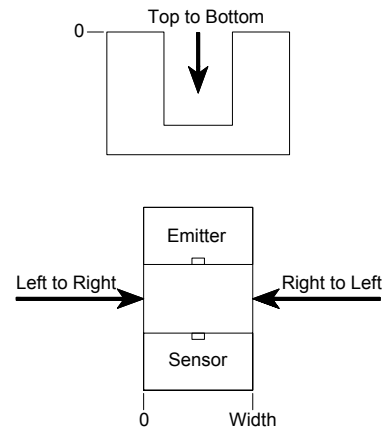
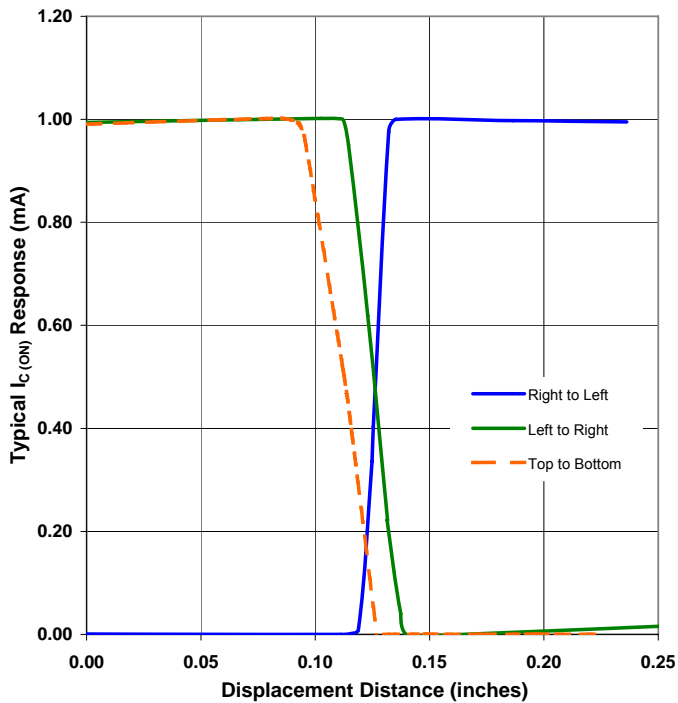
OPB660 - Flag Next to Emitter



OPB660 - Flag Next to Sensor



OPB660 - Flag in Middle of Slot



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