Tube Liquid Sensor

OPB350 / OCB350 Series

(Calibration Circuit Available)

Electrical Specifications

Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)

Storage Temperature	-40° C to +100° C
Operating Temperature	-40° C to +85° C
Lead Soldering Temperature [1/16 inch (1.6 mm) from the case for 5 sec. with soldering iron] (2)	260° C
LED	
Forward DC Current	50 mA
Peak Forward Current (2 µs pulse width, 0.1 % duty cycle)	1 A
Reverse DC Voltage	2 V
Power Dissipation	100 mW
Output Phototransistor	
Collector-Emitter Voltage	24 or 30 V
Collector DC Current	50 mA
Power Dissipation	100 mW

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
Input LED (See OP245 for additional information — for reference only)						
V_F	Forward Voltage	-	-	1.7	V	I_F = 20 mA
I_R	Reverse Current	-	-	100	µA	V_R = 2.0 V
Output Phototransistor (See OP555 [OPB350] & OP750 [-062, -125, -187 & -250] for additional information— for Ref. Only)						
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage OPB350 -062, -187 & -250	30 24	- -	- -	V	I_C = 100 µA, E_E = 0 mw/cm²
I_{CEO}	Collector-Emitter Dark Current	-	-	100	nA	V_{CE} = 10 V, I_F = 0, E_E = 0 mw/cm²
Coupled						
$V_{CE(SAT)}$	Collector-Emitter Saturation Voltage	-	-	0.4	V	I_C = 100 µA, I_F = 5 mA
$I_{C(ON)}$	On-State Collector Current OPB350L062 & OPB350W062Z OPB350 OPB350L125 & OPB350W125Z OPB350L187 & OPB350W187Z OPB350L250 & OPB350W250Z	 0.30 1.00 1.30 1.00 0.75	 0.8 3.5 2.6 2.0 1.5	 1.3 6.0 3.9 4.0 3.0	mA	V_{CE} = 0.4 V, I_F = 5 mA
On/Off Ratio	OPB350L062 & OPB350W062Z OPB350 OPB350L125 & OPB350W125 OPB350L187 & OPB350W187 OPB350L250 & OPB350W250	- - - - -	3.0 3.0 2.5 2.3 2.3	- - - - -	-	V_{CE} = 0.4 V, I_F = 5 mA , I.D.=0.0312"(6) V_{CE} = 0.4 V, I_F = 5 mA , I.D.=0.0625"(6) V_{CE} = 0.4 V, I_F = 5 mA , I.D.=0.0870"(6) V_{CE} = 0.4 V, I_F = 5 mA , I.D.=0.1250"(6)

General Note
TT Electronics reserves the right to make changes in product specification without notice or liability. All information is subject to TT Electronics' own data and is considered accurate at time of going to print.

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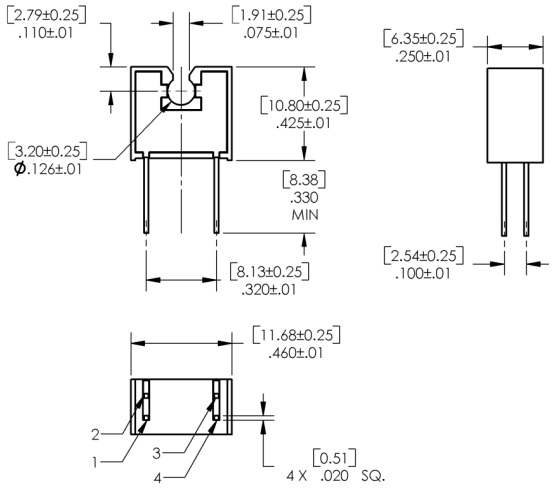
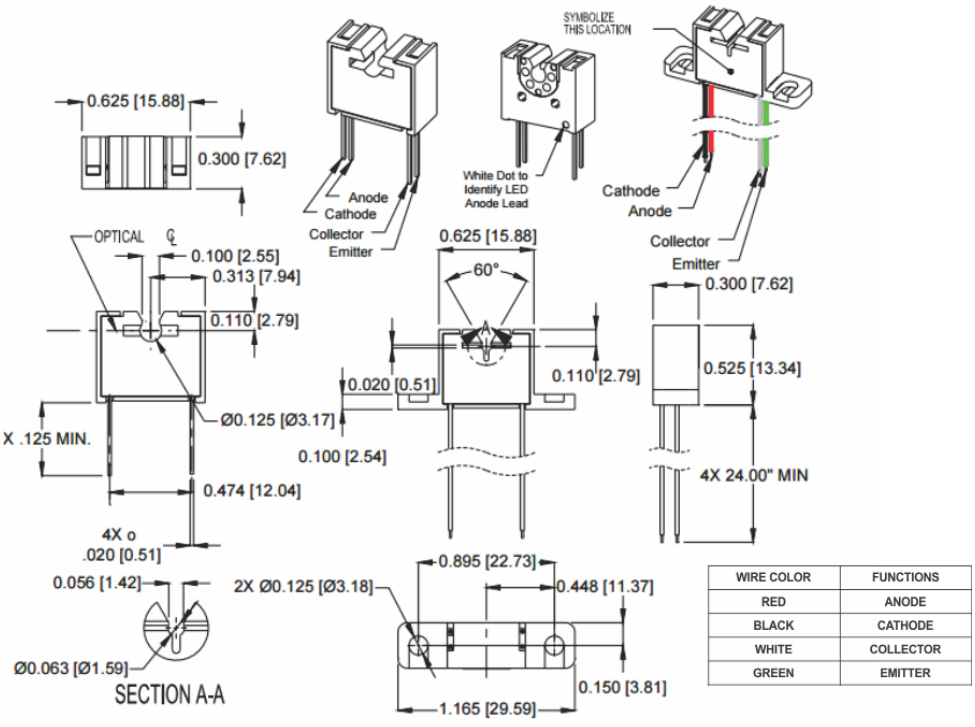
OPB350



OPB350L062 & OPB350W062Z
OPB350L125 & OPB350W125Z



WIRE COLOR	FUNCTIONS
RED	ANODE
BLACK	CATHODE
WHITE	COLLECTOR
GREEN	EMITTER

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