Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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High Reliability Photologic® Hermetic Sensors

OPL800TX, OPL800TXV

Features:

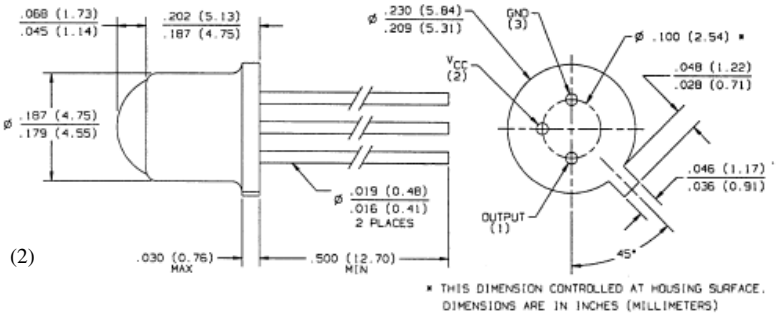
- 100% screened and quality conformance tested to Optek's High Reliability program
- Direct TTL/STTL interface
- Hermetic, lensed TO-18 package
- Mechanically and spectrally matched to OP235/OP236TX/TXV LEDs

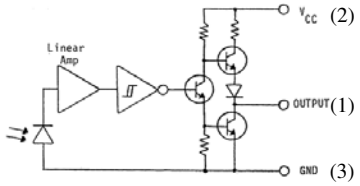
Description:

The OPL800TX/TXV is a high reliability optoelectronic microcircuit that incorporates a photodiode, linear amplifier and Schmitt trigger on a single silicon chip. The device features TTL/STTL compatible logic level output which can drive up to 8 TTL loads without additional interface circuitry. The Photologic® chip is mounted on a standard TO-18 header with gold plated leads which is hermetically sealed in a lensed gold plated metal can. These devices are mechanically and spectrally matched to the OP235TX/TXV and OP236TX/TXV infrared emitting diodes. All parts are processed to Optek's 100 percent screening program patterned after Method 5004 of MIL-STD-883 and the quality conformance testing of Method 5005. Typical characteristic curves are shown on the commercial OPL800 datasheet.

Applications:

- Non-contact reflective object sensor
- Assembly line automation
- Machine automation
- Machine Safety
- End of travel sensor
- Door sensor
- Military and harsh environments





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

Supply Voltage, V_{CC} (not to exceed 3 sec)	+10.0 V
Storage Temperature Range	-55° C to +150°C
Operating Temperature Range	-55° C to +125°C
Lead Soldering Temperature [1/16 inch (1.6 mm) from case for 5 sec. with soldering iron]	240°C(1)
Power Dissipation	250 mW(2)
Duration of Output Short to V_{CC} or Ground	1.00 sec
Irradiance	3 mW/cm^2

Notes:
1. RMA flux is recommended. Duration can be extended to 10 seconds maximum when wave soldering.
2. Derate linearly 2.5 mW/°C above 25°C.
3. Light measurements are made with λ = 935 nm.

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Group A Inspection-Electrical Tests

(Performed on each inspection lot after all devices have been subjected to the 100% processing requirements.)

SYMBOL	EXAMINATION OR TEST	METHOD	CONDITIONS	N/C	LIMIT		UNITS
					MIN	MAX	
Subgroup 1[3]							
I_{CCH}	Supply Current, High	3005	V_{CC}= 5.5 V, E_e = 1.0 mw/cm^2	116/0		15.0	mA
I_{CCL}	Supply Current, Low	3005	V_{CC}= 5.5 V, E_e = 0.0 mw/cm^2			15.0	mA
V_{OL}	Low Level Output Voltage	3007	V_{CC}= 4.5 V, I_{OL} = 12.8 mA, E_e = 0.0 mw/cm^2			0.40	V
V_{OH}	High Level Output Voltage	3006	V_{CC}= 4.5 V, I_{OH} = -800 µA, E_e = 1.0 mw/cm^2		2.4		V
I_{OS}	Short Circuit Output Current	3011	V_{CC}= 4.5 V, E_e = 1.0 mw/cm^2, Output = Ground		-20	-100	mA
Subgroup 2[3] **TA = +125**°C							
I_{CCH}	Supply Current, High	3005	V_{CC}= 5.5 V, E_e = 1.0 mw/cm^2	116/0		15.0	mA
I_{CCL}	Supply Current, Low	3005	V_{CC}= 5.5 V, E_e = 0.0 mw/cm^2			15.0	mA
V_{OL}	Low Level Output Voltage	3007	V_{CC}= 4.5 V, I_{OL} = 12.8 mA,			0.40	V
V_{OH}	High Level Output Voltage	3006	V_{CC}= 4.5 V, I_{OH} = -800 µA, E_e =		2.4		V
Subgroup 3[3] **TA = -55**°C							
I_{CCH}	Supply Current, High	3005	V_{CC}= 5.5 V, E_e = 1.0 mw/cm^2	116/0		15.0	mA
I_{CCL}	Supply Current, Low	3005	V_{CC}= 5.5 V, E_e = 0.0 mw/cm^2			15.0	mA
V_{OL}	Low Level Output Voltage	3007	V_{CC}= 4.5 V, I_{OL} = 12.8 mA, E_e = 0.0 mw/cm^2			0.40	V
V_{OH}	High Level Output Voltage	3006	V_{CC}= 4.5 V, I_{OH} = -800 µA, E_e = 1.0 mw/cm^2		2.4		V
Subgroup 3[3]							
t_r, t_f	Rise and Fall Time	3004	V_{CC}= 5.0 V, R_L = 8TTL loads	116/0		100	ns
t_{PHL}	Propagation Delay, Low-High	3003	V_{CC}= 5.0 V, R_L = 8TTL loads			10.0	µs
t_{PLH}	Propagation Delay, High-Low	3003	V_{CC}= 5.0 V, R_L = 8TTL loads			10.0	µs

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