

Sensor Solution Catalog

PhotoLink

PhotoLink, also known as Digital Audio Signal Transmission by Plastic Optical Fiber (POF), typically uses PMMA (acrylic), a general purpose resin, as the core material, and fluorinated polymers for the clad material. POF had been called the "consumer" optical fiber, and has a fiber diameter of 1000 μm , with a core diameter of 980 μm . POF has been used for transmission due to the fact that costs of POF, associated optical links, connectors and installation costs, are low.

PTIR - PhotoLink											
P/N	Description	Data Rate (Max)	Package	Operating Voltage (V)		Fiber Coupling Light Output (dBm)			Input Sensitivity (dBm)		
				Min	Max	Min	Typical	Max	Min	Typical	Max
13.2 Mbps											
LTDL-TX12P0x	Transmitter	13.2	Housing	2.75	5.25	-21	-17	-15	-	-	-
LTE-330T12C	Transmitter	13.2	7.5 x 3 x 2.2	2.75	5.25	-21	-17	-15	-	-	-
LTE-330T12C-F	Transmitter	13.2	7.5 x 3 x 2.2	2.75	5.25	-21	-17	-15	-	-	-
16 Mbps											
LTDL-RA16A	Reciever	16	7.5 x 3 x 2.2	2.75	5.25	-	-	-	-27	0	-14
LTDL-RX16S05	Reciever	16	Housing	2.4	5.5	-	-	-	-24	0	-14
LTDL-TA16A	Transmitter	16	7.5 x 3 x 2.2	2.75	5.25	-21	-17	-15	-	-	-
LTDL-TX16S05	Transmitter	16	Housing	2.75	5.25	-21	-17	-15	-	-	-
25 Mbps											
LTDL-TA25A/L3	Transmitter	25	7.5 x 3 x 2.2	2.75	5.25	-21	-17	-15	-	-	-
LTDL-TA25A/L4	Transmitter	25	7.5 x 3 x 2.2	2.75	5.25	-21	-17	-15	-	-	-
LTDL-TA25A-B2	Transmitter	25	7.5 x 3 x 2.2	2.75	5.25	-21	-17	-15	-	-	-
LTDL-TA25B-T	Transmitter	25	5.6 x 3.1 x 2.3	2.75	5.25	-21	-17	-15	-	-	-
50 Mbps											
LTE-330T50C	Transmitter	50	7.5 x 3 x 2.2	2.75	5.25	-21	-17	-15	-	-	-

Encoder

Optical encoders are devices that convert a mechanical position into a representative electrical signal by means of a patterned disk or scale, a light source and photosensitive elements. With proper interface electronics, position and speed information can be derived. Lite-On's optical encoders are used in a variety of applications where position & velocity sensing are required in a motion control system, such as in office automation, medical equipment, motor applications, etc. Lite-On encoders also offer designers the flexibility to build custom encoder assemblies that require a unique housing.

Encoder												
Part Number	Description	Package	LPI	Operating Supply Voltage (V)		Current Consumption (mA)	Duty cycle (%)		Phase difference (deg)		Response Frequency (kHz)	
				Min	Max		Typ	Min	Typ	Max	Typ	Max
LTOE-15D11	Encoder Module	Please contact local sales personnel for actual package & dimensions	150	2.7	5.5	1	50	60	90	120	20	50
LTOE-15D21	Encoder Module		150	2.7	5.5	1	50	60	90	120	20	50
LTOE-15D71	Encoder Module		150	2.7	5.5	1	50	60	90	120	20	50
LTOE-15DB1	Encoder Module		150	2.7	5.5	1	50	60	90	120	20	50
LTOE-18D71	Encoder Module		180	2.7	5.5	1	50	60	90	120	20	50
LTOE-30DC1	Encoder Module		300	2.7	5.5	1	50	60	90	120	20	50

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Infrared LED and Photodetector

Lite-On offers a broad range of discrete infrared emitters and detectors for use in various applications such as remote controls, IR wireless data transmission, security alarms, etc. The product line includes GaAs 940nm IREDs, AlGaAs high power 880nm IREDs, AlGaAs high speed 875nm/850nm IREDs, PIN Photodiodes, Phototransistors and Photodarlingtonts. Liteon Photodiodes and Phototransistors comprise various key features such as high power, high speed, wide viewing angels, high signal noise ratio and UL safety approval.

PTIR - Photodiode						
P/N		Description	Package	Short Circuit Current (uA)	Lens Color	Visible Light Filter
Through-Hole Packages				@ 0.1mW/cm²		
5mm	LTR-323DB	Thru-Hole	T-1 3/4	13	Dark	Y
	LTR-516AB / AD	Thru-Hole	T-1 3/4, Side view	2	Dark Blue / Dark Green	Y
	LTR-526AD	Thru-Hole	T-1 3/4, Side view	2	Dark Green	Y
Surface-Mount Packages				@ 0.5mW/cm²		
SMD	LTR-733DBM1-TA	SMD	T-1 3/4	37.5	Dark Green	Y
	LTR-743DBM1-TA	SMD	T-1 3/4	37.5	Dark Green	Y
	LTR-S320C	SMD	EIA: 3.0 x 1.0 x 2.0 side view	1.8	Clear Transparent	N
	LTR-S320CB	SMD	EIA: 3.0 x 1.0 x 2.0 side view	1.8	Black	Y
	HSDL-5400	SMD/ Thru-Hole	Subminiature Flat Top	0.8	Black	Y
	HSDL-5420	SMD/ Thru-Hole	Subminiature Dome	2	Black	Y

PTIR - Phototransistors						
P/N		Description	Package	On State Collector Current (mA)	Lens Color	Visible Light Filter
Through-Hole Packages				@ 1mW/cm²		
Through-Hole	LTR-209	Thru-Hole	T-1	5	Clear Transparent	N
	LTR-301	Thru-Hole	Side Look	2	Clear Transparent	N
	LTR-306	Thru-Hole	Side Look	1.5	Red	N
	LTR-309	Thru-Hole	Side Look	2	Clear Transparent	N
	LTR-1650D	Thru-Hole	T-1	4	Dark	Y
	LTR-3208	Thru-Hole	T-1 3/4	4	Clear Transparent	N
	LTR-3208E	Thru-Hole	T-1 3/4	2	Dark	Y
	LTR-4206 / E	Thru-Hole	T-1	4	Clear Transparent / Dark	N / Y
Surface-Mount Packages				@ 1mW/cm²		
SMD	LTR-C1503	SMD	EIA: 3.2 x 1.6 x 1.1	1	Clear	N
	LTR-C1503B	SMD	EIA: 3.2 x 1.6 x 1.1	1	Dark	Y
	LTR-C1903	SMD	EIA: 1.6 x 0.8 x 0.8	0.5	Clear	N
	LTR-C1903B	SMD	EIA: 1.6 x 0.8 x 0.8	0.5	Dark	Y
	LTR-C9303B	SMD	EIA: 3.2 x 2.4 x 2.4	1.5	Dark	Y

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PTIR - IR Emitting Diodes

	P/N	Description	Package	Wave-length (nm)	Radiant Intensity (mW/sr) @20mA	Max Continuous Forward Current (mA)	Viewing Angle (2θ)	Lens Color
Through-Hole Packages								
5mm	HSDL-4250	Thru-Hole	T-1 3/4	870	36	100	15	Clear Transparent
	HSDL-4251	Thru-Hole	T-1 3/4	870	20	100	30	Clear Transparent
	HSDL-4260	Thru-Hole	T-1 3/4	875	40	100	15	Clear Transparent
	HSDL-4261	Thru-Hole	T-1 3/4	870	36	100	26	Clear Transparent
	HSDL-4220	Thru-Hole	T-1 3/4	875	15	100	30	Clear Transparent
	HSDL-4230	Thru-Hole	T-1 3/4	875	30	100	17	Clear Transparent
	HSDL-4270	Thru-Hole	T-1 3/4	940	20	100	15	Clear Transparent
	LTE-3276	Thru-Hole	T-1 3/4	850	12	100	50	Clear Transparent
	LTE-3376	Thru-Hole	T-1 3/4	850	18	80	30	Clear Transparent
	LTE-3277	Thru-Hole	T-1 3/4	865	36	100	30	Clear Transparent
	LTE-3677	Thru-Hole	T-1 3/4	875	15	100	30	Clear Transparent
	LTE-4238	Thru-Hole	T-1 3/4	880	6	100	20	Clear Transparent
	LTE-5238A	Thru-Hole	T-1 3/4	880	6	100	40	Clear Transparent
	LTE-2871 / C	Thru-Hole	T-1 3/4	940	8	60	16	Clear Transparent / Smoke Transparent
	LTE-2872U	Thru-Hole	T-1 3/4	940	8	150	16	Clear Transparent
	LTE-3271A	Thru-Hole	T-1 3/4	940	8	100	50	Clear Transparent
	LTE-3279K	Thru-Hole	T-1 3/4	940	10	100	60	Light Blue Transparent
	LTE-3371T	Thru-Hole	T-1 3/4	940	8	100	40	Clear Transparent
	LTE-4208	Thru-Hole	T-1 3/4	940	10	50	20	Clear Transparent
	LTE-5208A / C	Thru-Hole	T-1 3/4	940	8	100	40	Clear Transparent / Smoke Transparent
	LTE-5228A	Thru-Hole	T-1 3/4	940	8	100	40	Clear Transparent
3mm	LTE-1650	Thru-Hole	T-1	940	5	60	60	Clear Transparent
	LTE-209	Thru-Hole	T-1	940	2	60	16	Clear Transparent
	LTE-4206 / C	Thru-Hole	T-1	940	5	60	20	Clear Transparent / Smoke Transparent
Side view	LTE-302	Thru-Hole	Side Look	940	1.5	50	40	Clear Transparent
	LTE-304	Thru-Hole	Side Look	850	3	80	30	Clear Transparent
	LTE-306	Thru-Hole	Side Look	940	1.5	50	30	Clear Transparent
Surface-Mount Packages								
SMD	LTE-7377LM1-TA	SMD	T-1 3/4	880	15	100	16	Blue Transparent
	LTE-7477LM1-TA	SMD	T-1 3/4	880	15	100	16	Blue Transparent
	HSDL-4400	SMD / Thru-Hole	Subminiature Flat Top Gull Wing Lead	875	1	100	110	Clear Transparent
	HSDL-4420	SMD / Thru-Hole	Subminiature Dome Gull Wing Lead	875	6	100	24	Clear Transparent
	LTE-C211	SMD	EIA: 3.2 x 1.6 x 1.1	940	2.5	60	75	Clear Transparent
	LTE-C216R-14	SMD	EIA: 3.2 x 1.6 x 1.1	850	5.5	60	75	Clear Transparent
	LTE-C1906	SMD	EIA: 1.6 x 0.8 x 0.8	850	2.3	50	130	Clear Transparent
	LTE-C9306R-14	SMD	EIA: 3.2 x 2.4 x 2.4	850	18	60	20	Clear Transparent
	LTE-S0086	SMD	EIA: 2.8 x 1.2 x 0.8 sideview	850	2.5	30	110	Clear Transparent
	LTE-S2706	SMD	EIA: 1.6 x 0.6 x 1.15 sideview	850	2	50	130	Clear Transparent
	LTE-S3201	SMD	EIA: 3.0 x 1.0 x 2.0 sideview	940	1	50	130	Clear Transparent

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Photointerrupter

Lite-On Photointerrupters include slotted, reflective and actuator types with connectors. These Photointerrupters are most suited for use in applications such as printers, scanners, copy machines, facsimile machines and vending machines. Our highly reliable, accurate and customized devices fulfill specific customers' sensor requirements.

Photointerrupter							
P/N	Description	Slot Gap (mm)	Response time		On / Off Characteristics		Operating Temperature (deg °C)
			Rise Time (us)	Fall Time (us)	Collector Emitter Dark Current (nA)	On State Collector Current (mA)	
			Typ	Typ	Max	Min	
Actuator							
LTH-301-50W1	Actuator	-	3	4	100	0.5	-25 to +85
LTH-306-06W2/7/8	Actuator	-			100	0.5	-25 to +85
LTH-306-09S	Actuator	-			100	0.5	-25 to +85
LTH-306-30	Actuator	-			100	0.5	-25 to +85
LTH-306-31	Actuator	-			100	0.5	-25 to +85
LTH-306-49	Actuator	-			100	0.5	-25 to +85
Reflective							
LTH-1550-01 / -01A	Reflective	-			100		-25 to +85
LTH-1650-01	Reflective	-	3	4	100		-25 to +85
LTH-209-01	Reflective	-			100	0.16	-35 to +65
Slotted							
LTH-301-05	Slotted	6	3	4	100	0.5	-25 to +85
LTH-301-07 / -07P5	Slotted	5	3	4	100	0.6	-25 to +85
LTH-301-07P5BS	Slotted	5.1	3	4	100	0.6	-25 to +100
LTH-301-07P5-M	Slotted	5			100	0.5	-55 to +100
LTH-301-19	Slotted	4.1	3	4	100	0.07	-25 to +85
LTH-301-23	Slotted	5	3	4	100	0.4	-25 to +85
LTH-301-23P1	Slotted	5	25	26	100	0.4	-25 to +85
LTH-301-27P1 / P2	Slotted	4.1			100	1.5	-35 to +65
LTH-301-32	Slotted	15	3	4	100	0.6	-25 to +85
LTH-301-45Wx/ - 47Wx	Slotted	3.2	3	4	100	0.5	-25 to +85
LTH-301-47W7	Slotted	3.2	3	4	100	0.5	-25 to +85
LTH-301A / A-N	Slotted	5.2			100	0.5 / 1.2	-25 to +85
LTH-301AP1	Slotted	5.2			100	0.5	-25 to +85
LTH-306-01	Slotted	2.7	3	4	100	5	-25 to +85
LTH-306-02 / -02Wxx	Slotted	3	3	4	100	0.5	-25 to +85
LTH-306-04 /-04M	Slotted	5	3	4	100	0.5 / 1.0	-25 to +85
LTH-306-41 /-41P	Slotted	4.8	3	4	100	1 / 0.5	-25 to +85
LTH-306-53P1/ -58Wx	Slotted	2.7	3	4	100	1.2	-25 to +85
LTH-306-58W30	Slotted	5	3	4	100	1.5	-25 to +85
LTH-306-58Wx / -58Wxx	Slotted	5	3	4	100	1	-25 to +85
LTH-306-60W2	Slotted	3	3	4	100	1	-25 to +85
LTH-306-64	Slotted	5	3	4	100	0.5	-25 to +85
LTH-309-08 / 08P1	Slotted	5	3	4	100	0.5 / 1.5	-25 to +85
LTH-309-14	Slotted	2.95			100		-40 to +100

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