

### FEATURES

- 850nm Peak Wavelength
- Point Source
- Long Life
- RoHS Compliant
- High Reliability

### DESCRIPTION

The LP-0850-011 Series are point source LEDs with peak wavelength of 850nm. Available in a TO-46 flat window cap. In contrast with conventional IR LEDs, point sources offer effective suppression of undesirable side radiation along with simple collimation. Due to these special characteristics, IR point sources are an ideal radiation source in optical rotary encoders. They also guarantee efficient coupling with optical fibers for data transmission.

### APPLICATIONS

- Encoders
- Line Sensing
- Edge Sensing
- Instrumentation
- Linear Positioning
- Short Haul Fiber
- Optical Switches
- Machine Vision
- Medical Sensing
- Distance and Range Finding

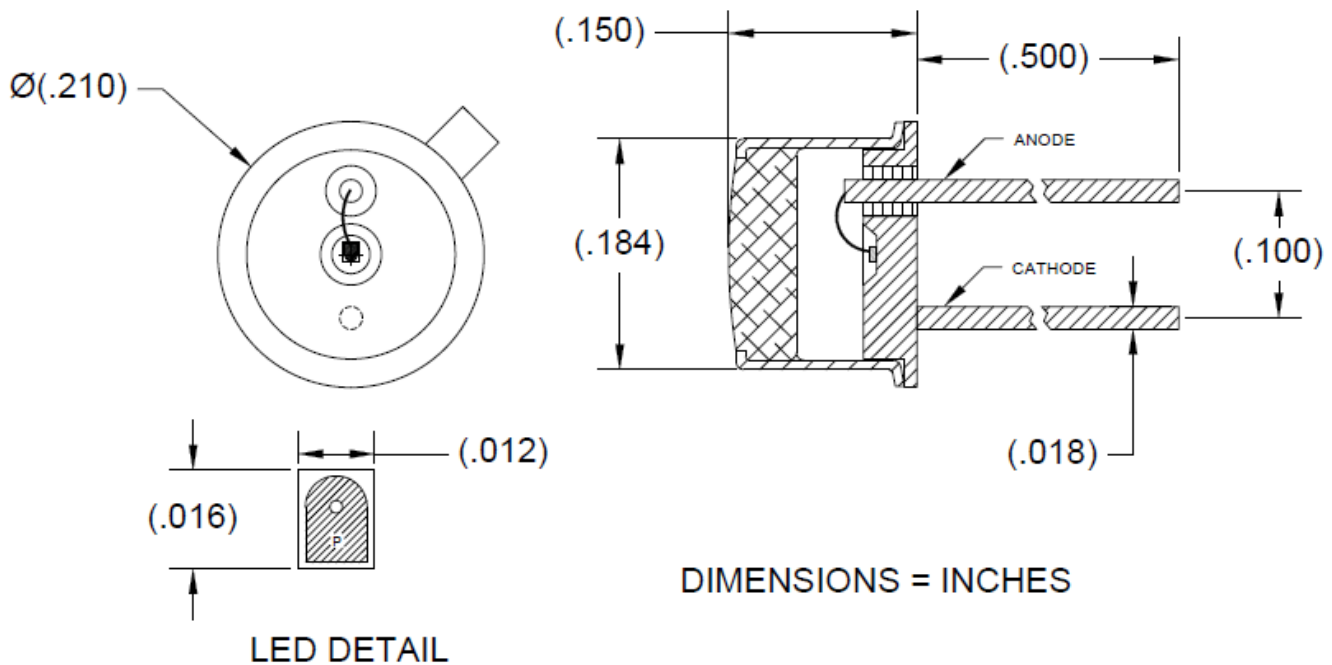
#### > Absolute Maximum Ratings

Part No.	Forward DC Current [mA]	Reverse Voltage [V]	Operating Temperature [C]	Storage Temperature [C]	Package
LP-0850-011	20	5	-40 to +100	-40 to +125	Window Cap

#### > Electrical and Optical Characteristics

Typical Characteristics (T=23°C unless specified)						
Parameter	Test Conditions	Symbol	Min	Typical	Max	Unit
Forward Voltage	$I_f = 50 \text{ mA}$	$V_F$	-	1.95	2.2	V
Reverse Current	$V_R = 5V$	$I_R$	-	-	100	$\mu\text{A}$
Peak Wavelength	$I_f = 50 \text{ mA}$	$\lambda_p$	-	850	-	nm
Radiant Power	$I_f = 20 \text{ mA}$	$\Phi_e$	-	0.6	-	mW
	$I_f = 50 \text{ mA}$		1.0	1.2	-	
Switching Time	$I_f = 20 \text{ mA}$ , Rise	$t_r$	-	10	-	ns
	$I_f = 20 \text{ mA}$ , Fall	$t_f$	-	15	-	

> TO-46 Window Cap [LP-0850-011]



>Soldering Conditions: 260°C 1/16 inch away from case for 3 seconds max.

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## MATERIALS SAFETY

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