



**Datasheet**

**LCA-S-400K-SI**

**Low Noise 400 kHz Photoreceiver with Si PIN Photodiode**



The photoreceiver will be delivered without post holder and post

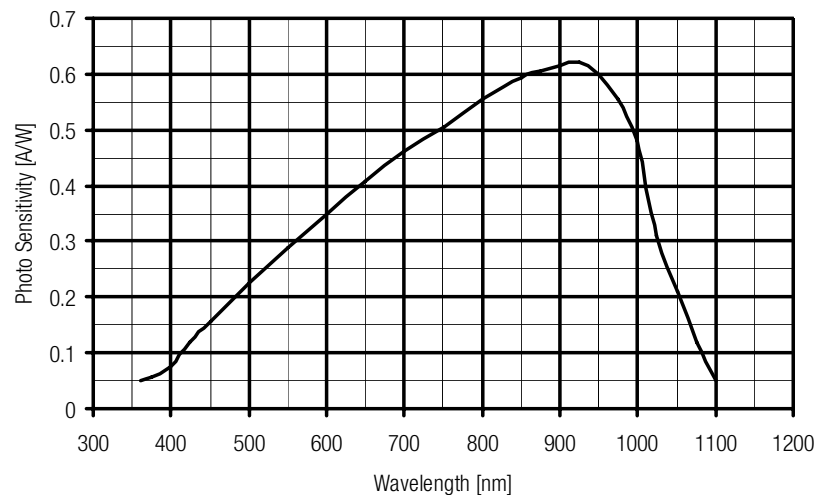
Features	<ul style="list-style-type: none"> <li>• <b>Large Area Si PIN Detector, 2.5 mm Active Diameter</b></li> <li>• <b>Spectral Range 400 ... 1100 nm</b></li> <li>• <b>Amplifier Transimpedance Gain <math>1.0 \times 10^7</math> V/A</b></li> <li>• <b>Max. Conversion Gain <math>6.2 \times 10^6</math> V/W @ 900 nm</b></li> <li>• <b>Bandwidth DC ... 400 kHz</b></li> </ul>																																													
Applications	<ul style="list-style-type: none"> <li>• <b>Spectroscopy</b></li> <li>• <b>General Purpose Opto-Electronic Measurements</b></li> <li>• <b>Optical Front-End for Oscilloscopes, A/D Converters and Lock-In Amplifiers</b></li> </ul>																																													
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with Si PIN Photodiode**

## Specifications (continued)

Output	Output Voltage Range	$\pm 10\text{ V}$	( $\geq 1\text{ M}\Omega$ load)
	Max. Output Current	$\pm 30\text{ mA}$	
	Output Impedance	$50\ \Omega$	(designed for $\geq 1\text{ M}\Omega$ load)
	Output Noise	ca. $10\text{ mV}$ peak-peak or $1.5\text{ mV}$ rms	( $\geq 1\text{ M}\Omega$ load, no signal on detector)
Power Supply	Supply Voltage	$\pm 15\text{ V}$	
	Supply Current	$\pm 40\text{ mA}$ typ.	(depends on operating conditions, recommended power supply capability minimum $\pm 150\text{ mA}$ )
Case	Weight	210 g (0.5 lbs)	
	Material	AlMg4.5Mn, nickel-plated	
Temperature Range	Storage Temperature	$-40 \dots +100\text{ }^\circ\text{C}$	
	Operating Temperature	$0 \dots +60\text{ }^\circ\text{C}$	
Absolute Maximum Ratings	Optical Input Power	10 mW	
	Power Supply Voltage	$\pm 22\text{ V}$	

## Spectral Response

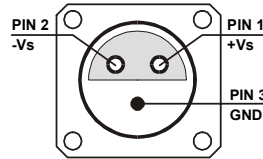


# Datasheet

# LCA-S-400K-SI

## Low Noise 400 kHz Photoreceiver with Si PIN Photodiode

Connectors	Input	25 mm round flange for free space applications (fiber optic input available as customized unit)
	Output	BNC
	Power Supply	LEMO series 1S, 3-pin fixed socket Pin 1: + 15V Pin 2: - 15V Pin 3: GND



Available Models	LCA-S-400K-SI-FS LCA-S	free space input customized version available on request
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Dimensions		
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