

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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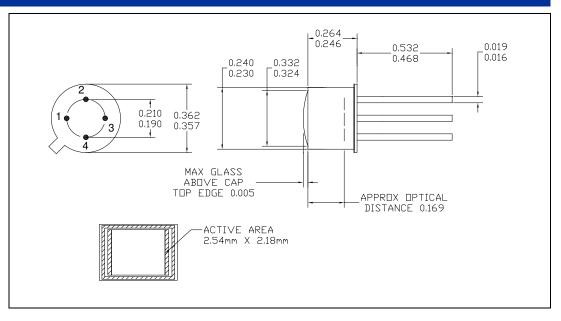




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DESCRIPTION

The **SD 112-45-11-221** is a detector/amplifier hybrid that combines a silicon photodiode with an opamp with a feedback resistor and capacitor, available in a hermetic TO-5 metal can package.

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

FEATURES

- Low Noise
- Blue Enhanced
- Feedback Circuit
- Single Supply Operation

APPLICATIONS

- Instrumnetation
- Industrial
- Medical



ABSOLUTE MAXIMUM RATINGS

SYMBOL	MIN	TYP	MAX	UNITS	
Volage V+ to V-	5	-	15	V	T _a = 23°C UNLESS OTHERWISE NOTED
Power Dissipation	-	360	-	mW	-
Storage Temperature	-25	-	+100	°C	-
Soldering Temperature*	-	-	+240	°C	-

* 1/16 inch from case for 3 seconds max.



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OPTO-ELECTRICAL PARAMETERS

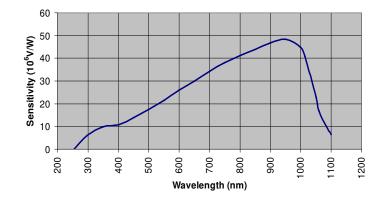
T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	TYP	MAX	UNITS
Cutoff Frequency	-	-	.13	-	KHZ
Transimpedance Gain	-	-	600	-	$\mathbf{M}\Omega$
Sensitivity	l= 633 nm	2.4x10 ⁸	2.8x10 ⁸	-	V/W
Output Offset Voltage	-	-	.08	±1	mV
Broadband Noise	f= 0.01Hz to 135 Hz	-	-	52	uV_{rms}
Noise Equivalent Power	f= 0.01Hz to 135 Hz	-	3.5x10 ⁻¹⁴	-	W/√Hz
Supply Current	-	-	850	950	μА
Output Voltage Swing	-	-	0 to 4.7	0 to 4.7	V

^{**}Response time of 10% to 90% is specified at 830nm wavelength light.

TYPICAL PERFORMANCE

SPECTRAL RESPONSE

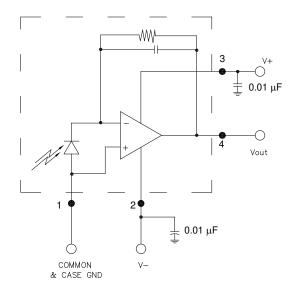




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SCHEMATIC AND CONNECTION DIAGRAM



Note: Components shown outside the dashed area are external to the device, and must be supplied by the user.