

FEATURES

- Low noise
- Blue enhanced
- Feedback circuit
- High speed

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.

APPLICATIONS

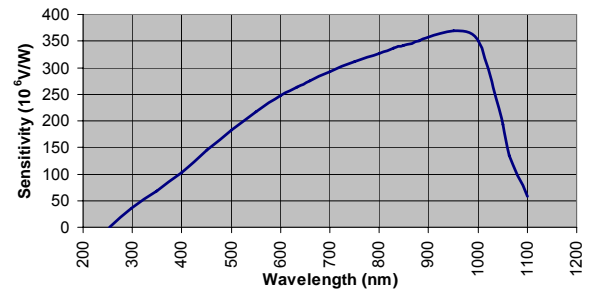
- Instrumentation
- Industrial
- Medical

ABSOLUTE MAXIMUM RATING (TA)= 23°C UNLESS OTHERWISE NOTED

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS
V _s	Voltage Supplies	± 5		± 15	V
P	Power Dissipation		360		mW
T _{STG}	Storage Temperature	-25		+100	°C
T _s	Soldering Temperature*		+240		°C

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

SPECTRAL SENSITIVITY

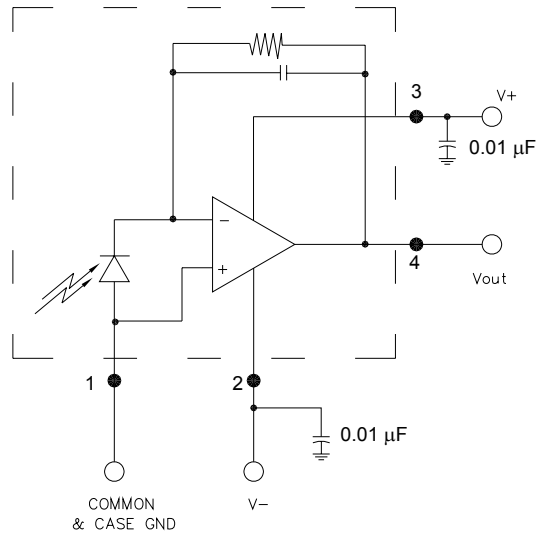


ELECTRO-OPTICAL CHARACTERISTICS RATING (TA)= 23°C, V_s = ± 5V, R_i > 1MΩ, UNLESS OTHERWISE NOTED

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
f _{3db}	Cutoff Frequency			0.13		KHz
Gain	Transimpedance Gain			600		MΩ
S	Sensitivity	I = 633 nm	2.8x10 ⁸	2.4x10 ⁸		V/W
V _{os}	Output Offset Voltage			0.08	± 1	mV
I _s	Power Supply Current			0.8	0.9	mA
V _n	Broadband Noise	f = 0.01Hz to 135 Hz			52	uV _{rms}
NEP	Noise Equivalent Power	f = 0.01Hz to 135 Hz		3.5x10 ⁻¹⁴		W/√Hz
I _s	Supply Current			850	950	uA
V _{OSW}	Output Voltage Swing			0 to 4.7	0 to 4.7	V

Information in this technical datasheet is believed to be correct and reliable. However, no responsibility is assumed for possible inaccuracies or omission. Specifications are subject to change without notice.

SCHEMATIC AND CONNECTION DIAGRAM



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