

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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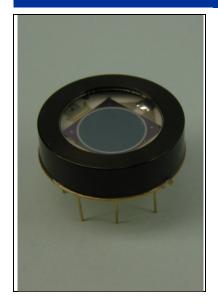


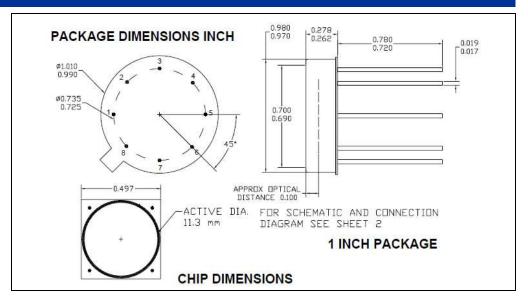
Detector/Amplifier Hybrids Without Feedback Resistor RED ENHANCED

SD 444-41-21-261

WWW.LUNAINC.COM

Precision - Control - Results





DESCRIPTION

The **SD 444-42-21-231** is a red enhanced detector/amplifier that combines a silicon photodiode with an opamp without a feedback network, Packaged in a hermetic metal can package.

FEATURES

- Low Noise
- Red Enhanced
- Custom Feedback
- Large Area

RELIABILITY

Contact Luna for recommendations on specific test conditions and procedures.

APPLICATIONS

- Instrumentation
- Medical
- Industrial



ABSOLUTE MAXIMUM RATINGS

T_a = 23°C UNLESS OTHERWISE NOTED

SYMBOL	MIN	TYPE	MAX	UNITS	
Voltage Supplies	±5	±15	±18	V	
Input Offset Voltage	-	1	2	mV	
Input Voltage Noise@ f=10KHz	-	12	-	nV/√Hz	
Input Bias Current	-	15	40	рА	
Input Current Noise @ f=10KHz	-	20	30	fA/√Hz	
Gain Bandwidth Product	-	18	-	MHz	
Supply Current	-	6.5	7	mA	
Storage Temperature	-65	-	+125	°C	
Operating Temperature	-40	-	-85	°C	

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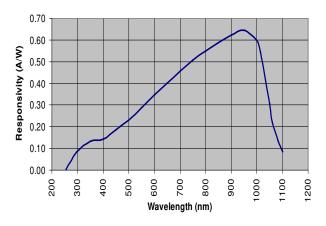
OPTO-ELECTRICAL PARAMETERS

T_a = 23°C UNLESS NOTED OTHERWISE

PARAMETER	TEST CONDITIONS	MIN	ТҮР	MAX	UNITS
Dark Current	V _R = 10 V	-	-	150	nA
Shunt Resistance	$V_R = 0 V$	15	-	-	ΜΩ
Junction Capacitance	$V_R = 0V$; $f = 1 MHz$	-	1700	-	pF
	V _R =10V; f = 1 MHz	-	340	-	
Spectral Application Range	Spot Scan	250	-	1100	nm
Responsivity	λ = 940nm, V_R = 0 V	-	.55	-	-

TYPICAL PERFORMANCE

SPECTRAL RESPONSE



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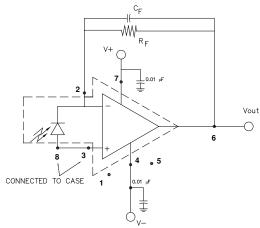
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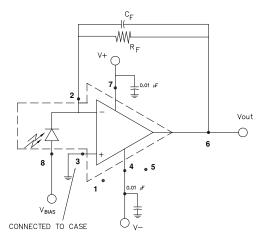
SCHEMATIC AND CONNECTION DIAGRAM

PHOTOVOLTAIC MODE



PINS 1 AND 5 ARE NOT CONNECTED

PHOTOCONDUCTIVE MODE



PINS 1 AND 5 ARE NOT CONNECTED

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

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