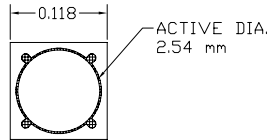
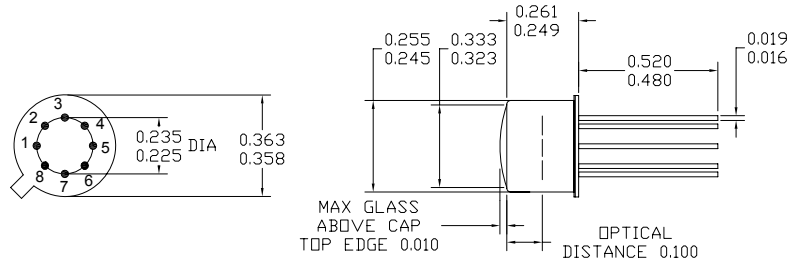




PACKAGE DIMENSIONS INCH



FOR SCHEMATIC AND CONNECTION DIAGRAM SEE SHEET 2

TO-5 PACKAGE

CHIP DIMENSIONS

FEATURES

- Low noise
- UV enhanced
- Custom feedback
- High speed

DESCRIPTION

The **SD 100-42-23-232** is a UV enhanced detector/amplifier that combines a silicon photodiode with an opamp without a feedback network, Packaged in a hermetic TO-5 metal can package.

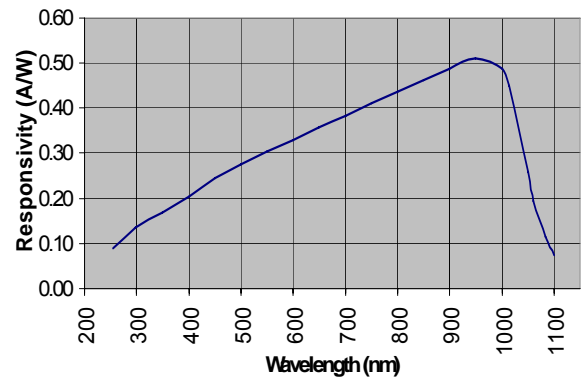
APPLICATIONS

- Instrumentation
- Industrial
- Medical

AMPLIFIER SPECIFICATIONS (TA)= 23°C UNLESS OTHERWISE NOTED

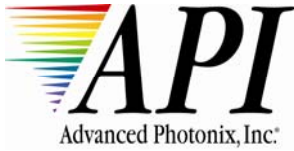
SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS
V _s	Voltage Supplies	± 5	± 15	± 18	V
V _{io}	Input Offset Voltage		1	2	mV
V _n	Input Voltage Noise @ f = 10KHz		12		nV/√Hz
I _{ib}	Input Bias Current		15	40	pA
I _{io}	Input Offset Current		20	30	pA
I _n	Input Current Noise @ f = 10KHz		20	30	fA/√Hz
GBP	Gain Bandwidth Product		18		MHz
I _s	Supply Current		6.5	7	mA
T _{STG}	Storage Temperature	-65		+125	°C
T _O	Operating Temperature	-40		+85	°C

SPECTRAL RESPONSE

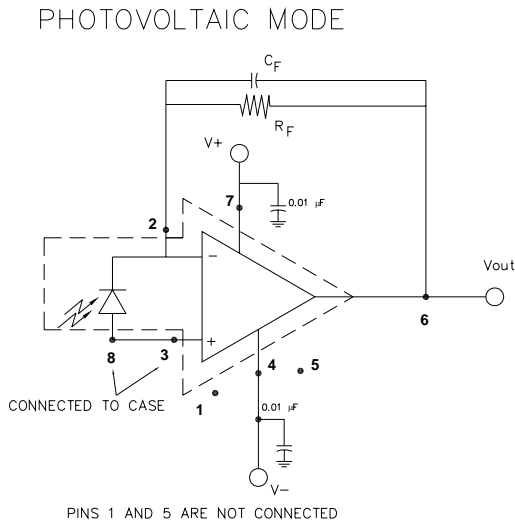


DETECTOR SPECIFICATIONS (TA)= 23°C UNLESS OTHERWISE NOTED

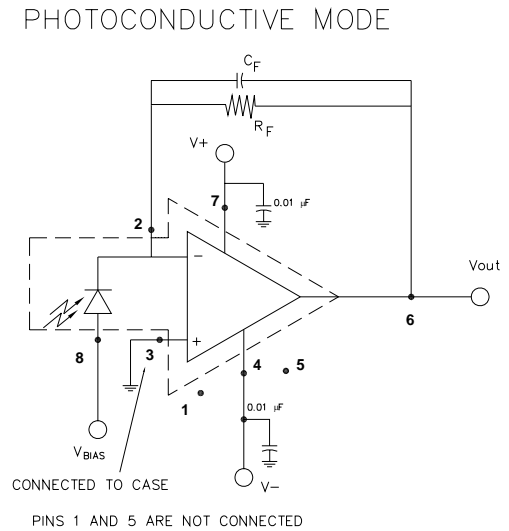
SYMBOL	CHARACTERISTIC	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _D	Dark Current	V _R = 10 V			10	nA
R _{SH}	Shunt Resistance	V _R = 0 V	300			MΩ
C _J	Junction Capacitance	V _R = 0 V, f = 1 MHz		87		pF
		V _R = 10 V, f = 1 MHz		18		
λ range	Spectral Application Range	Spot Scan	250		1100	nm
R	Responsivity	λ = 365 nm, V _R = 0 V		0.15		



SCHEMATIC AND CONNECTION DIAGRAM



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



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

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.