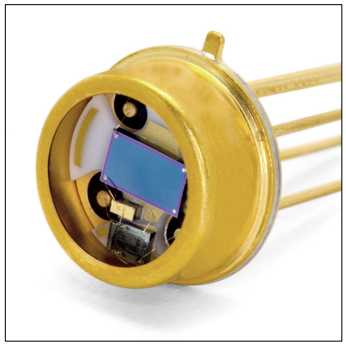
From Deep UV to Mid-IR
OPTO DIODE
An ITW Company

NIR/Red Enhanced 6 mm² Photodiode-Preamplifier

ODA-6W-100M



FEATURES

- Large Active Area
- Low Noise
- High Sensitivity
- Custom Gains Available
- Hermetically Sealed TO-39

Electro-Optical Characteristics at 23°C

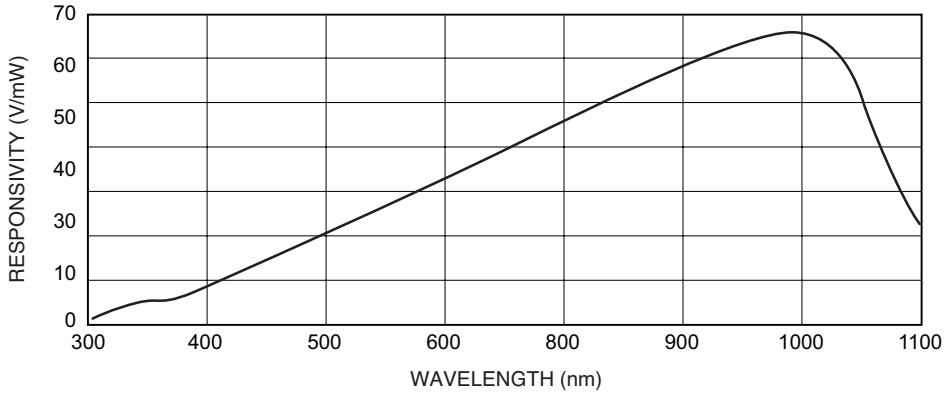
Parameters	Test Conditions	Min	Typ	Max	Units
Active Area	3.30 mm x 1.78 mm		5.87		mm^2
Dark Offset	V_s = ±5 V		1.2	±2	mV
Dark Offset Noise	V_s = ±5 BW = 0.1 to 1000 kHz		198	250	µV rms
Sensitivity	V_s = ±5 V λ = 940 nm	55	63		V/µW
Frequency Response (–3 db)	V_s = ±5 V	900	1000		Hz
NEP	λ = 940 nm		30		fW/√Hz
Transimpedance Gain			100		MΩ
Supply Current			850	950	µA

Absolute Ratings

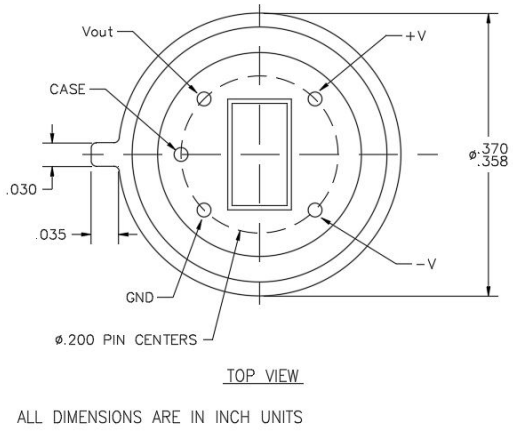
Parameters	Units
Voltage Supply Range +V to –V*	5 to 15 V
Power Dissipation	15 mW
Storage and Operating Temperature	–25 to + 100°C
Soldering Temperature (1/16" from case for 3 seconds max)	+260°C

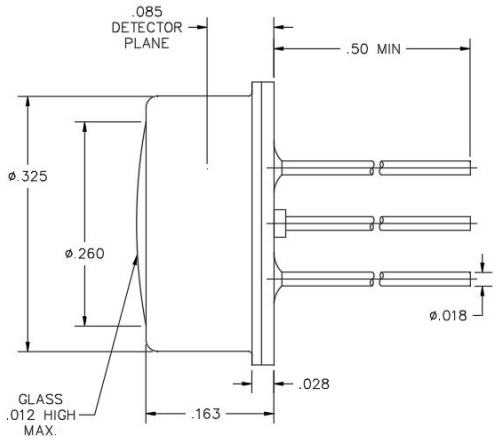
*Voltage supply across the device requires a minimum of 5 V to a maximum of 15 V from +V to –V.

Typical Spectral Response

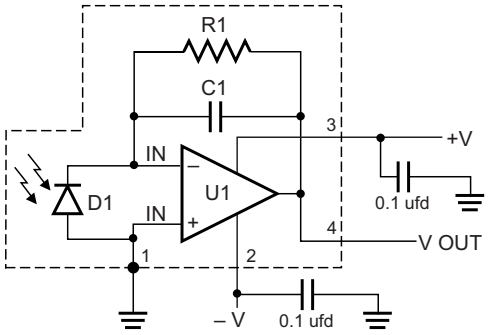


Package Information





Dimensions are in inch [metric] units.



Specifications are subject to change without prior notice.

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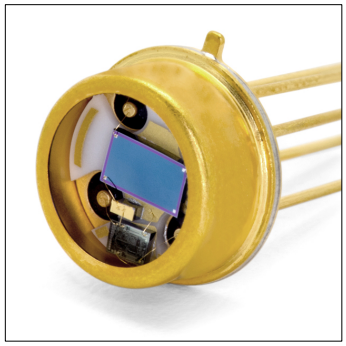
NIR/Red Enhanced 6 mm² Photodiode-Preamplifier

ODA-6W-500M



FEATURES

- Large Active Area
- Low Noise
- High Sensitivity
- Custom Gains Available
- Hermetically Sealed TO-39

Electro-Optical Characteristics at 23°C

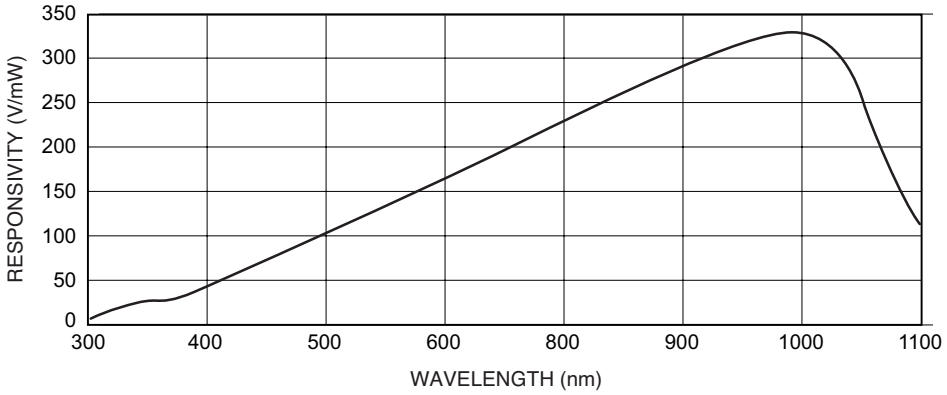
Parameters	Test Conditions	Min	Typ	Max	Units
Active Area	3.30 mm x 1.78 mm		5.87		mm^2
Dark Offset	V_s = ±5 V		1	±2	mV
Dark Offset Noise	V_s = ±5 BW = 0.1 to 135 kHz		283	500	µV rms
Sensitivity	V_s = ±5 V λ = 940 nm	275	315		V/µW
Frequency Response (–3 db)	V_s = ±5 V	100	130		Hz
NEP	λ = 940 nm		1.2		fW/√Hz
Transimpedance Gain			500		MΩ
Supply Current			850	950	µA

Absolute Ratings

Parameters	Units
Voltage Supply Range +V to –V*	5 to 15 V
Power Dissipation	15 mW
Storage and Operating Temperature	–25 to + 100°C
Soldering Temperature (1/16" from case for 3 seconds max)	+260°C

*Voltage supply across the device requires a minimum of 5 V to a maximum of 15 V from +V to –V.

Typical Spectral Response



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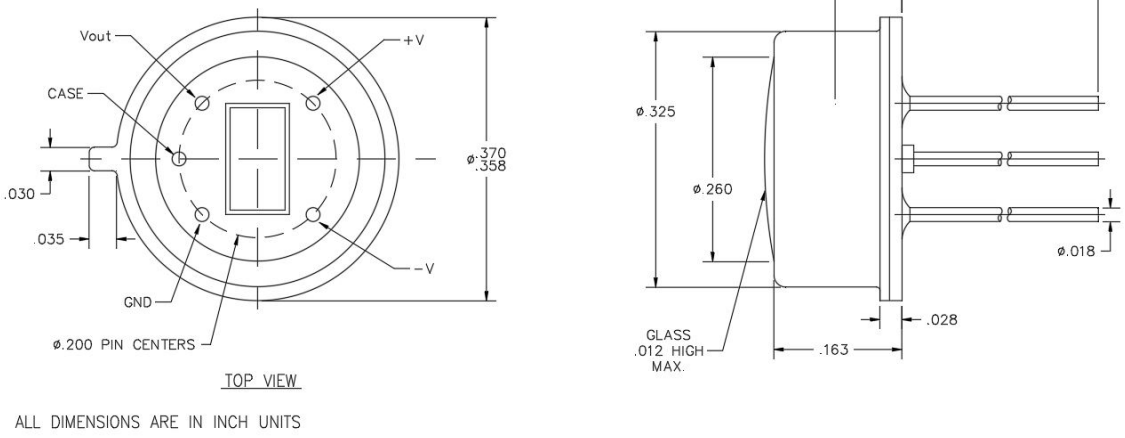
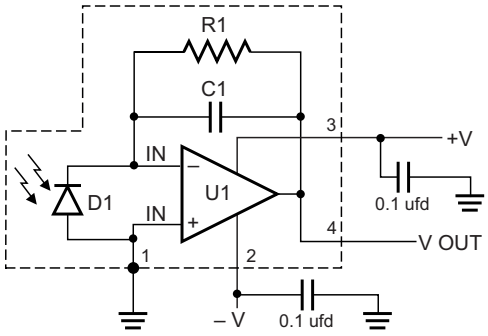


ALL DIMENSIONS ARE IN INCH UNITS

Dimensions are in inch [metric] units.



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From Deep UV to Mid-IR
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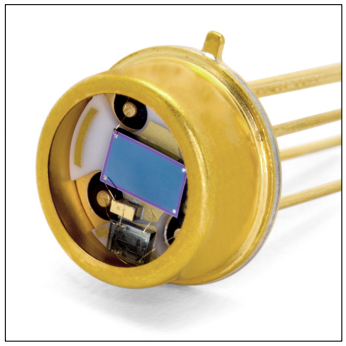
An ITW Company

Blue/Green Enhanced 6 mm² Photodiode-Preamplifier

ODA-6WB-100M



FEATURES

- Large Active Area
- Low Noise
- High Sensitivity
- Custom Gains Available
- Hermetically Sealed TO-39
- Blue Enhanced Detector

Electro-Optical Characteristics at 23°C

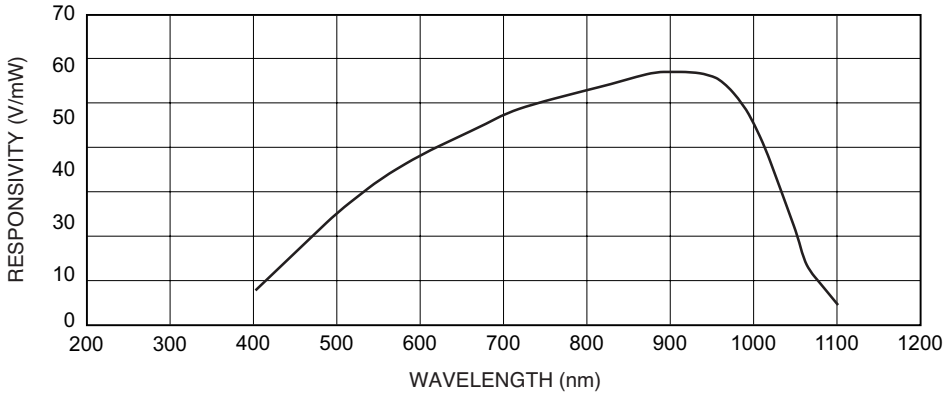
Parameters	Test Conditions	Min	Typ	Max	Units
Active Area	3.30 mm x 1.78 mm		5.87		mm^2
Dark Offset	V_s = ±5 V		1.2	±2	mV
Dark Offset Noise	V_s = ±5 BW = 0.1 to 1000 kHz		198	250	µV rms
Sensitivity	V_s = ±5 V λ = 450 nm	17	20		V/µW
Frequency Response (–3 db)	V_s = ±5 V	900	1000		Hz
NEP	λ = 450 nm		85		fW/√Hz
Transimpedance Gain			100		MΩ
Supply Current			850	950	µA

Absolute Ratings

Parameters	Units
Voltage Supply Range +V to –V*	5 to 15 V
Power Dissipation	15 mW
Storage and Operating Temperature	–25 to +100°C
Soldering Temperature (1/16" from case for 3 seconds max)	+260°C

*Voltage supply across the device requires a minimum of 5 V to a maximum of 15 V from +V to –V.

Typical Spectral Response



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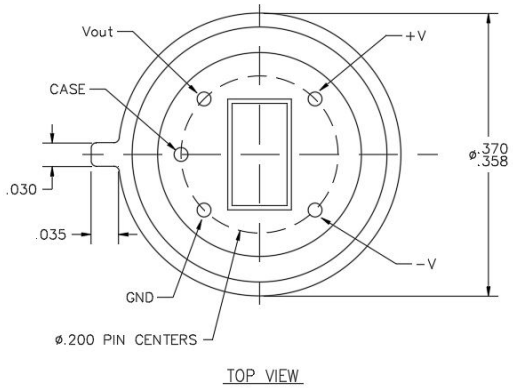

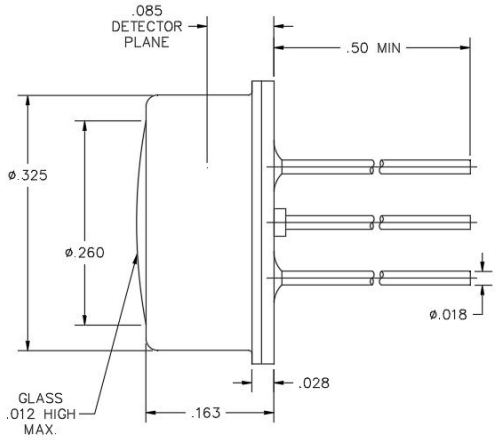

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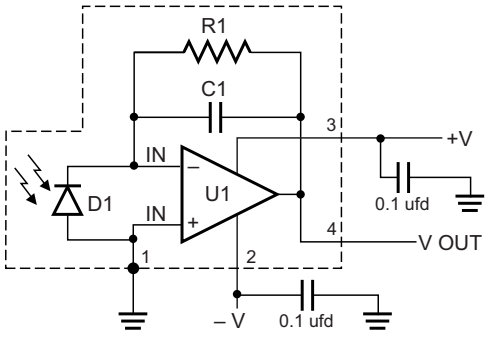

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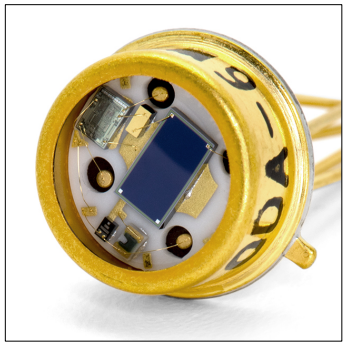
Blue/Green Enhanced 6 mm² Photodiode-Preamplifier

ODA-6WB-500M



FEATURES

- Large Active Area
- Low Noise
- High Sensitivity
- Custom Gains Available
- Hermetically Sealed TO-39
- Blue Enhanced Detector

Electro-Optical Characteristics at 23°C

Parameters	Test Conditions	Min	Typ	Max	Units
Active Area	3.30 mm x 1.78 mm		5.87		mm^2
Dark Offset	V_s = ±5 V		1	±2	mV
Dark Offset Noise	V_s = ±5 BW = 0.1 to 135 kHz		283	500	µV rms
Sensitivity	V_s = ±5 V λ = 450 nm	85	100		V/µW
Frequency Response (–3 db)	V_s = ±5 V	100	130		Hz
NEP	λ = 450 nm		4		fW/√Hz
Transimpedance Gain			500		MΩ
Supply Current			850	950	µA

Absolute Ratings

Parameters	Units
Voltage Supply Range +V to –V*	5 to 15 V
Power Dissipation	15 mW
Storage and Operating Temperature	–25 to +100°C
Soldering Temperature (1/16" from case for 3 seconds max)	+260°C

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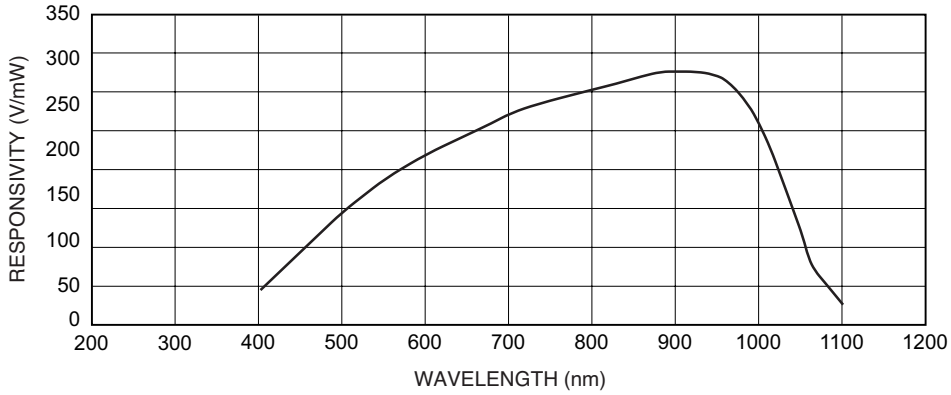
Typical Spectral Response



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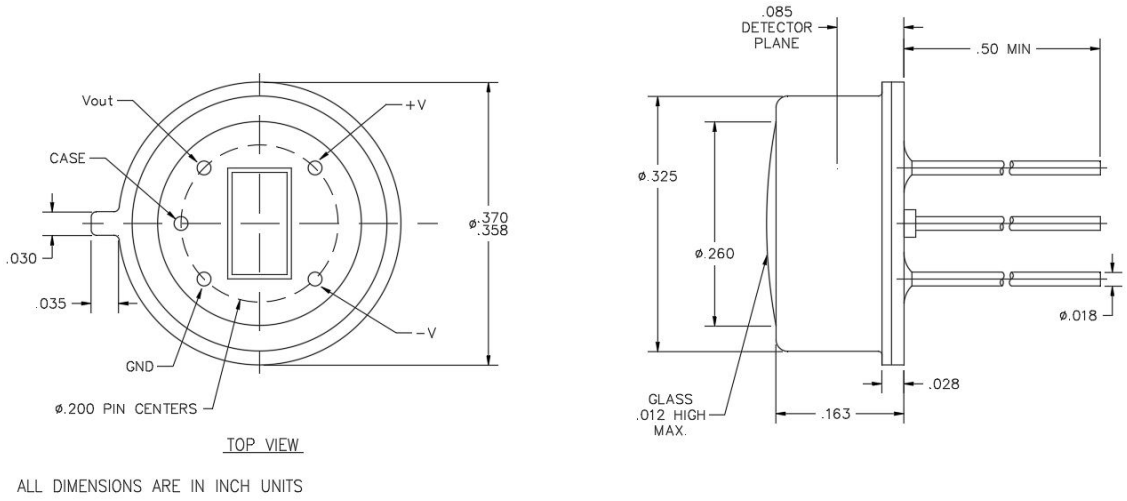

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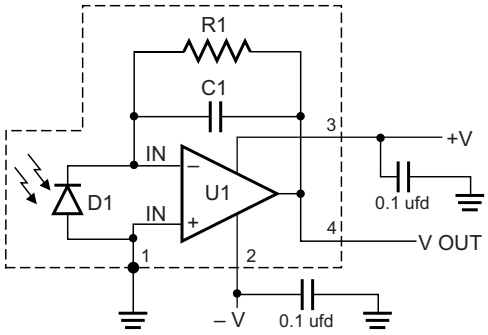

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