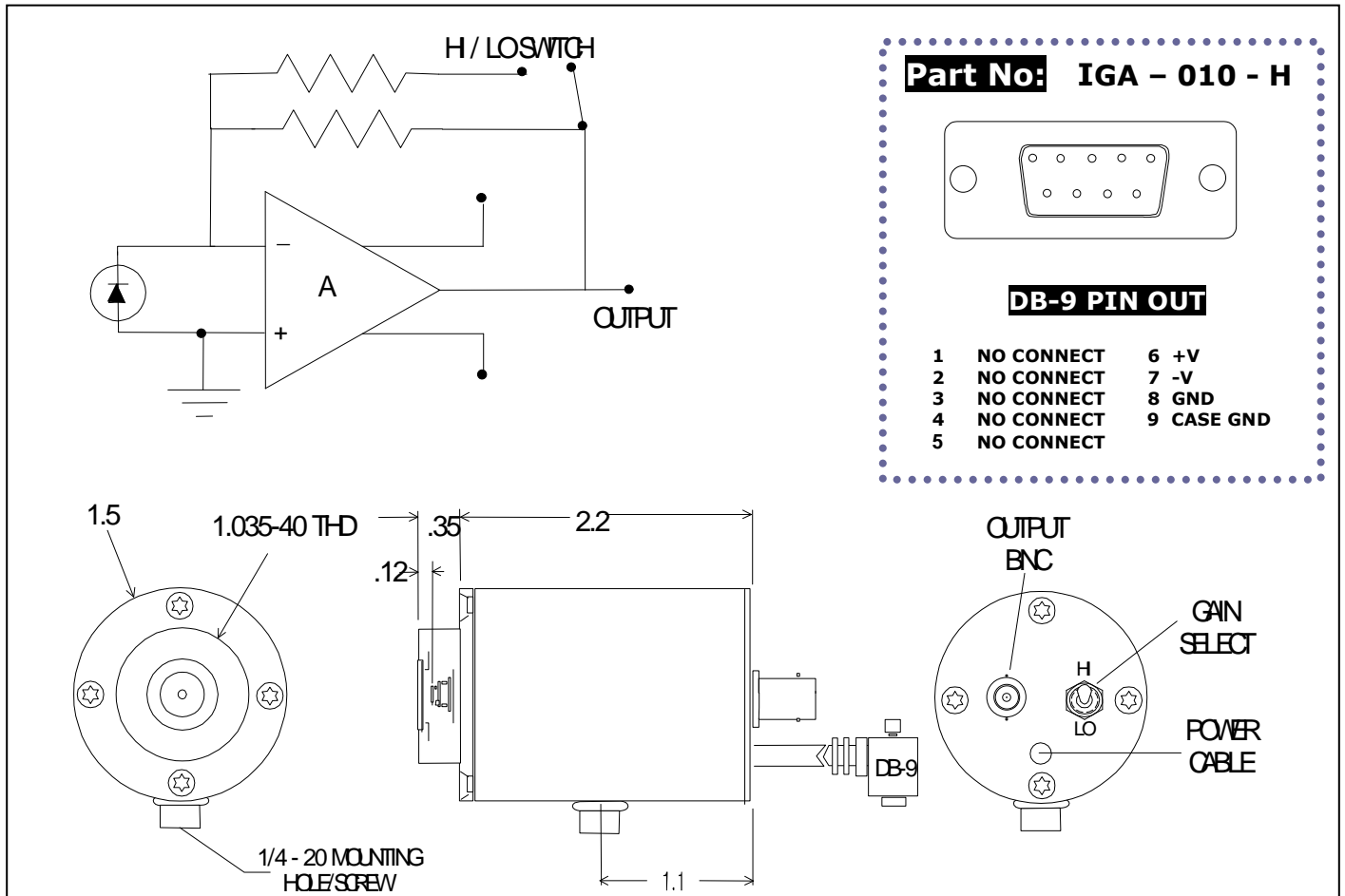


## H - SERIES PHOTODIODE / RECEIVER



**Application Note** This unit is a high performance photodiode/receiver operated at ambient temperature with a dual gain FET input transimpedance amplifier. The output voltage is proportional to the input signal current:  $V_{out} = I_{signal} \cdot R_f$ . The PD/AMP is a DC coupled dual gain system. Care should be taken in shielding the unit from stray light during operation to prevent saturation of the amplifier (and potential failure).

### SPECIFICATIONS

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Detector Type	1.0 mm dia Indium Gallium Arsenide Photodiode
Operating Temperature-	22
Operating Wavelength-	0.8 - 1.7
Responsivity- V/W @ pk	$0.9 \times 10^9 / 0.9 \times 10^8$
Noise- V/Hz <sup>1/2</sup>	$15 \times 10^{-6} / 1.5 \times 10^{-6}$
NEP- W/Hz <sup>1/2</sup> @ pk	$< 2.0 \times 10^{-14}$
Bandwidth (-3dB)- Hz	DC - 500 / 2kHz
Power Requirements	+/- 9 VDC to +/- 15 VDC
Connections	BNC signal output. Shielded power cable terminated with a DB-9 connector directly couples the unit with the PS -1 Low Noise Power Supply.

**RoHS Compliant**