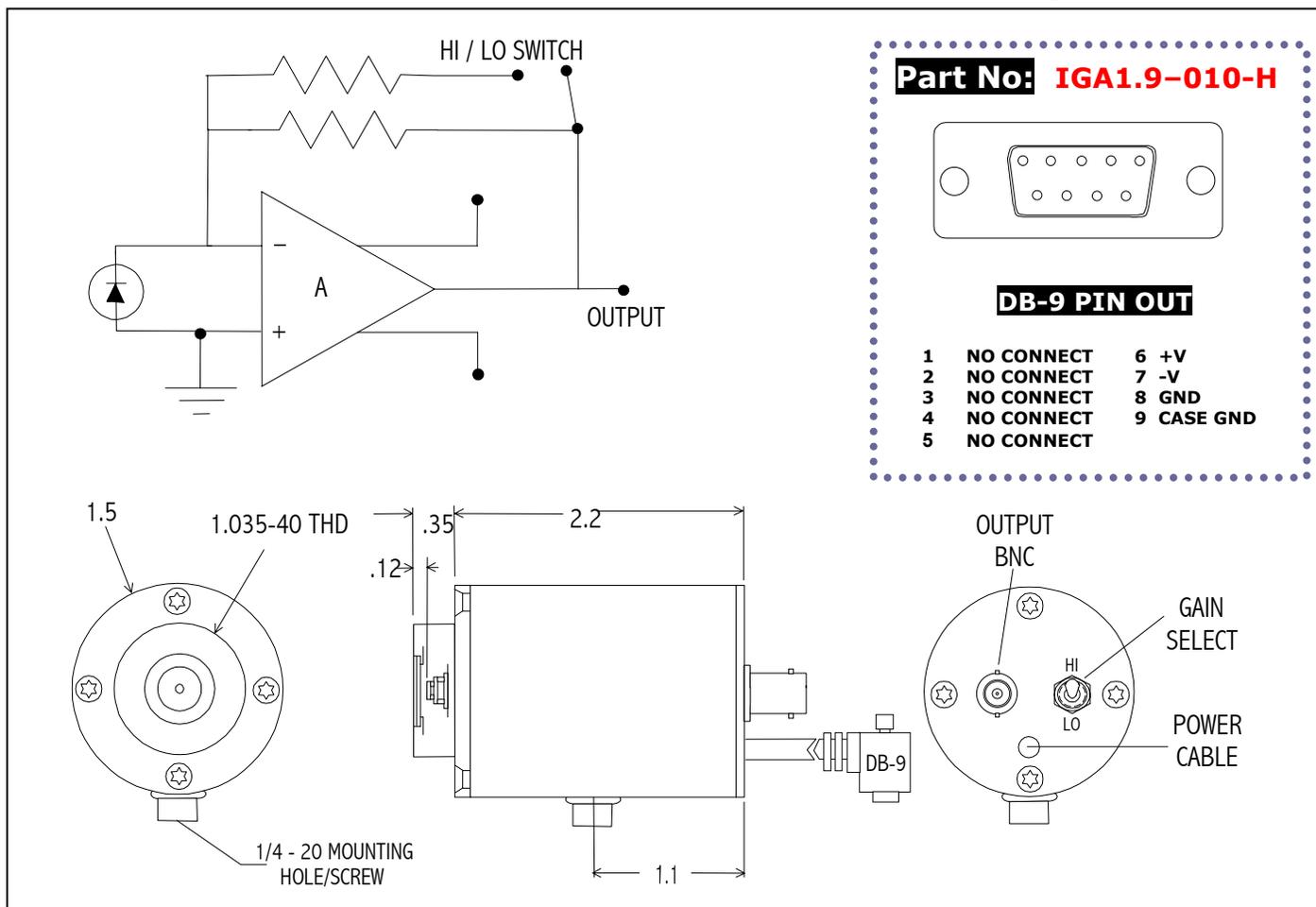


H - SERIES PHOTODIODE / RECEIVER



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

| | |
|-------------------------------------|--|
| Detector Type | 1.0 mm dia extended InGaAs Photodiode |
| Operating Temperature- °C | 22 |
| Operating Wavelength- μm | 1.2 – 2.1 |
| Responsivity- V/W @ pk | $0.9 \times 10^7 / 0.9 \times 10^6$ |
| Noise- V/Hz^{1/2} | $5 \times 10^{-6} / 0.5 \times 10^{-6}$ |
| NEP- W/Hz^{1/2} @ pk | $< 5.0 \times 10^{-13}$ |
| Bandwidth (-3dB)- Hz | DC – 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. |