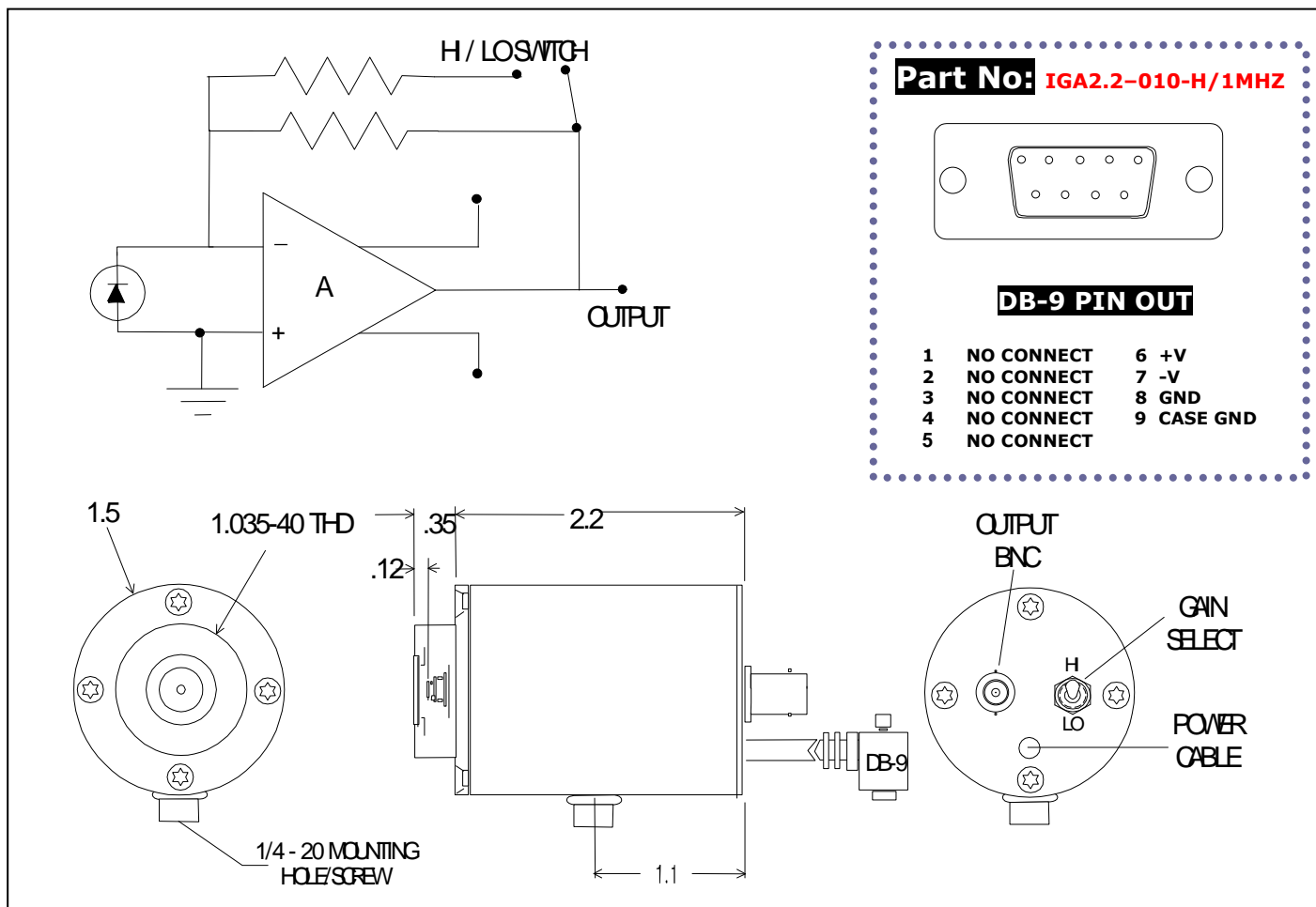


H - SERIES PHOTODIODE / RECEIVER



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 ex-Indium Gallium Arsenide Photodiode
Operating Temperature- °C	22
Operating Wavelength- μm	1.3 – 2.6
Responsivity- V/W @ pk	10⁴ / 10³
Noise- V/Hz^{1/2}	15 x 10⁻⁹ / 2.0 x 10⁻⁹
NEP- W/Hz^{1/2} @ pk	< 1.5 x 10⁻¹²
Bandwidth (-3dB)- Hz	DC – 1MHz
Rise Time	300 nsec
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.