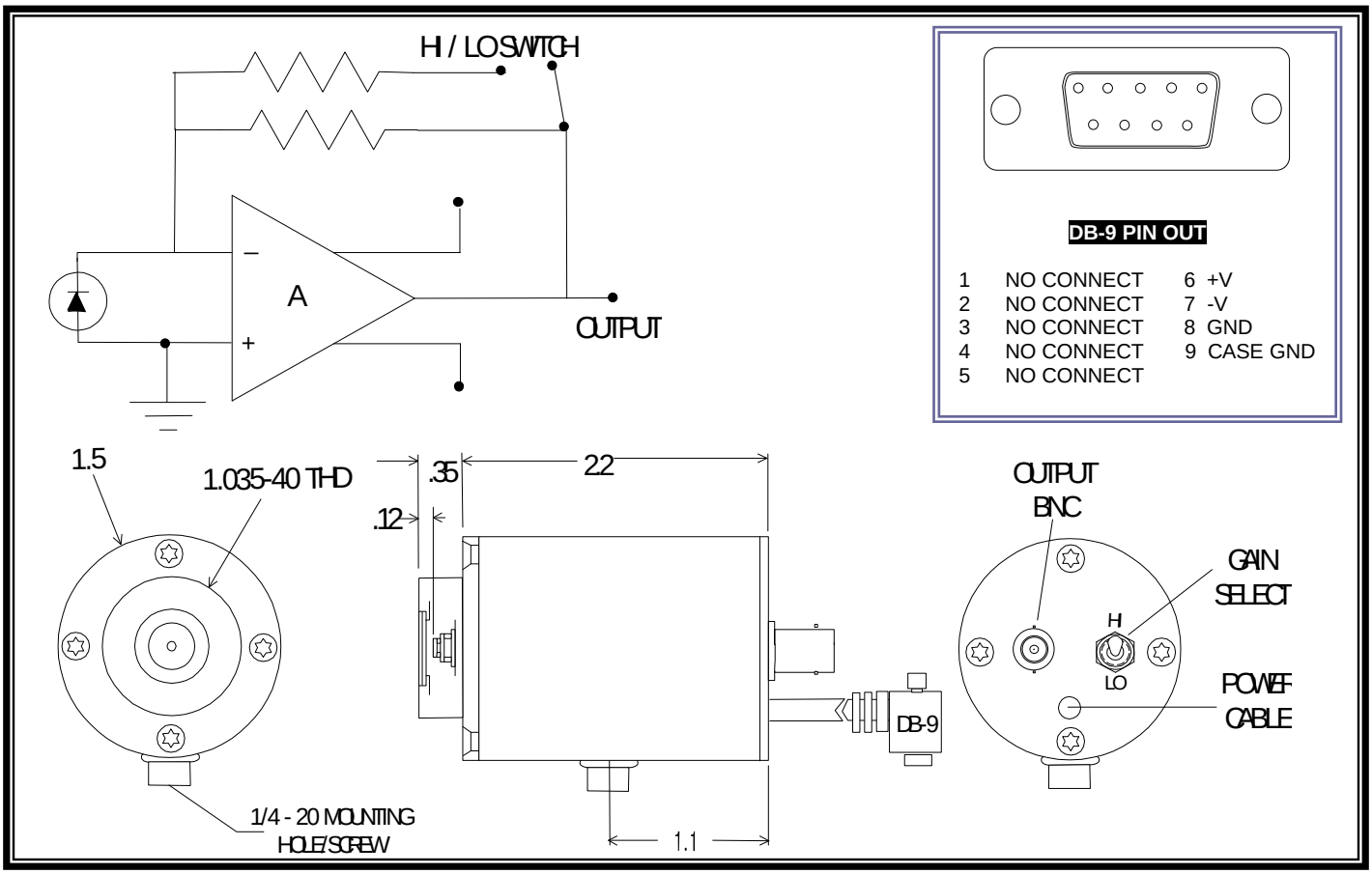
Receiver Modules

GERMANIUM PHOTODIODE RECEIVERS



Application Note This unit is a high performance photodiode/receiver operated with at ambient temperature with a dual gain FET input transimpedence 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 @ 23° C NOM.			
Part Number	**G – 020 - H**	**G – 030 - H**	**G – 050 - H**
Active Area	**2mm dia**	**3mm dia**	**5mm dia**
Operating Wavelength- μm	**0.8 – 1.8**		
Responsivity- V/W @ pk	**0.8×10^7 / 10^6**	**0.8×10^7 / 10^6**	**0.8×10^6 / 10^5**
Noise- $V/Hz^{1/2}$	**4.0×10^{-6} / $\times 10^{-7}$**	**6.0×10^{-6}/ 10^{-7}**	**1×10^{-6} / 10^{-7}**
NEP- $W/Hz^{1/2}$ @ pk	**5×10^{-13}**	**7.5×10^{-13}**	**1.2×10^{-12}**
Bandwidth (-3dB)- Hz	**DC – 2k**		
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.**		

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