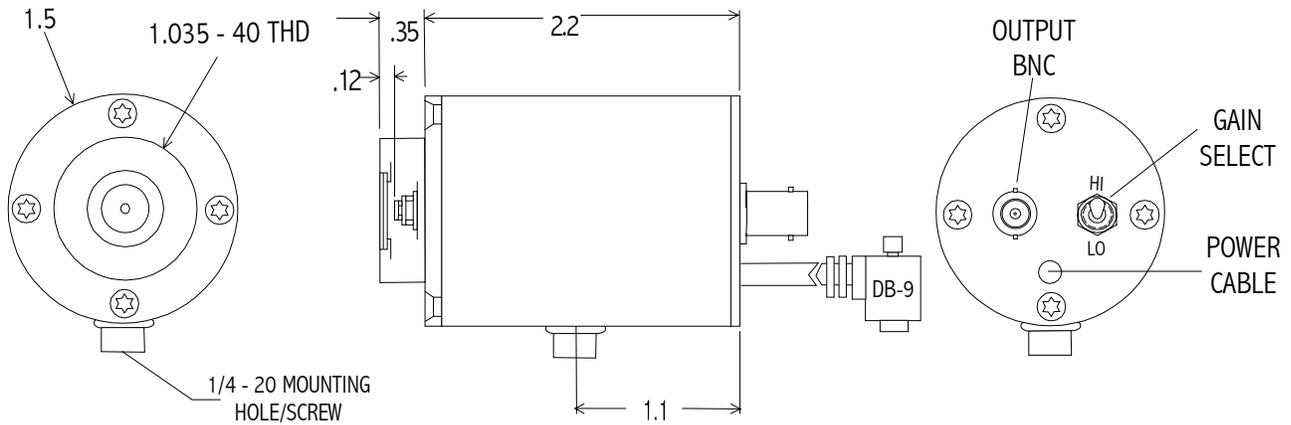
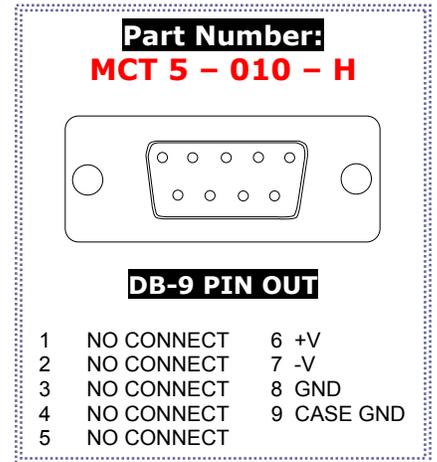
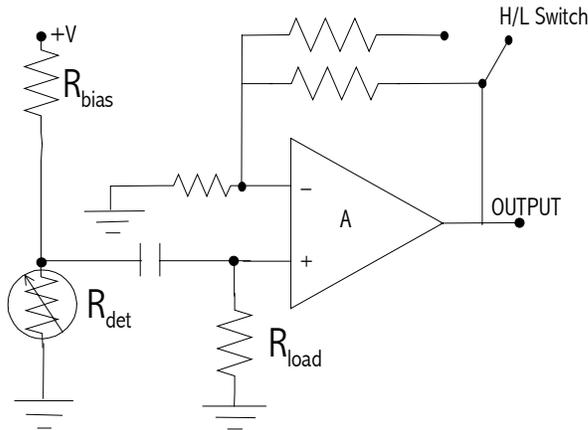


## MCT - SERIES PHOTOCONDUCTOR / RECEIVER



### Application Note

This unit is a high performance photoconductor/receiver operated at ambient temperature with a dual gain voltage amplifier. The detector's bias voltage is linked to the amplifier power supply and no additional biasing is necessary. The PC/AMP is an AC coupled dual gain detector system requiring a modulated input signal for operation.

## SPECIFICATIONS

<b>Detector Type</b>	<b>1 x 1 mm HgCdTe Photoconductor</b>
<b>Operating Temperature - °C</b>	<b>22</b>
<b>Operating Wavelength - μm</b>	<b>1.0 - 5.0</b>
<b>Responsivity - V/W @ pk</b>	<b><math>0.5 \times 10^5 / 10^4</math></b>
<b>Noise - V/Hz<sup>1/2</sup></b>	<b><math>1.0 \times 10^{-6} / 10^{-7}</math></b>
<b>D* - cm - Hz<sup>1/2</sup> /W @ pk</b>	<b><math>&gt; 5 \times 10^9</math></b>
<b>Bandwidth (-3dB) - Hz</b>	<b>5 - 50 k +</b>
<b>Power Requirements</b>	<b>+/- 9 VDC to +/- 15 VDC</b>
<b>Connections</b>	<b>BNC signal output. Shielded power cable terminated with a DB-9 connector directly couples the unit with the PS -1 Low Noise Power Supply.</b>