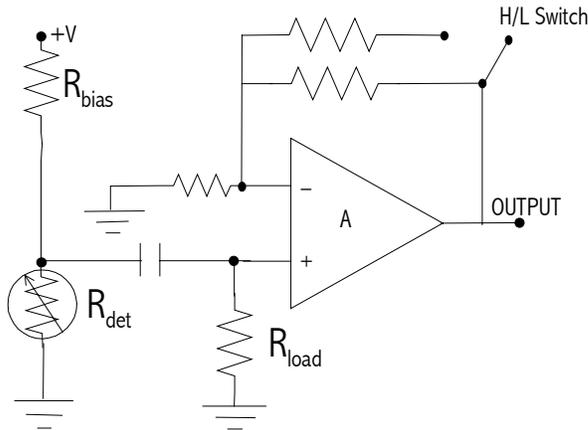


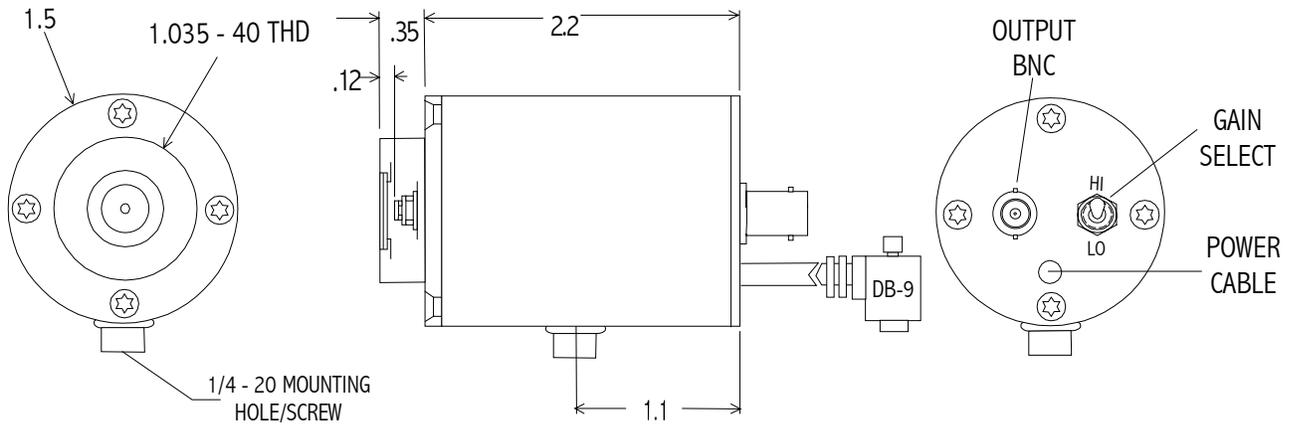
MCT - SERIES PHOTOCONDUCTOR / RECEIVER



Part Number:
MCT4.5 - 020 - H

DB-9 PIN OUT

| | | | |
|---|------------|---|----------|
| 1 | NO CONNECT | 6 | +V |
| 2 | NO CONNECT | 7 | -V |
| 3 | NO CONNECT | 8 | GND |
| 4 | NO CONNECT | 9 | CASE GND |
| 5 | NO CONNECT | | |



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

| | |
|---|--|
| Detector Type | 2 x 2 mm HgCdTe Photoconductor |
| Operating Temperature - °C | 22 |
| Operating Wavelength - μm | 1.0 - 4.5 |
| Responsivity - V/W @ pk | $5 \times 10^4 / 10^3$ |
| Noise - V/Hz^{1/2} | $1 \times 10^{-6} / 10^{-7}$ |
| D* - cm - Hz^{1/2} /W @ pk | $> 1 \times 10^{10}$ |
| Bandwidth (-3dB)- Hz | 5 - 50 k + |
| 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. |