



PYQ 1548 DigiPyro®

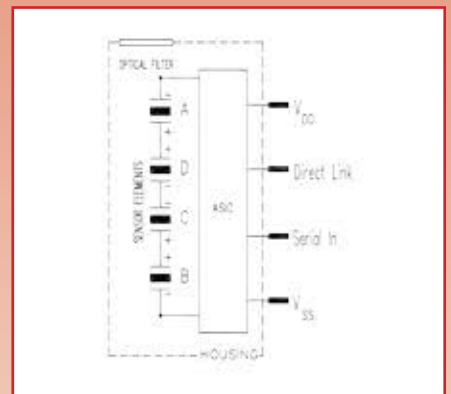
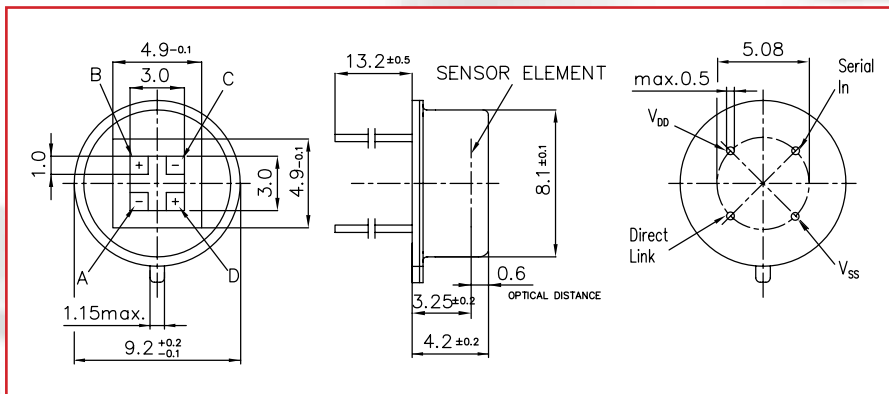
The PYQ1548 represents the 4-Element version of the Low-Power DigiPyro "Gen2". Similar to PYQ1648 this Sensor offers the Quad type Element configuration with single output.



PYQ 1548 offers the same significant reduction of supply voltage requirements, operating at 1,8 V – 3,6V as PYD 15 types. All functionality is identical to the PYD 15 Series: selectable band-pass function, selection of pulse count and

wake-up / sleep mode promotes power savings and extends service life, making it ideal for prolonged battery-operated motion detection. The Quad Element configuration makes this device best suited for ceiling mount sensor applications.

- **The new generation DigiPyro** addresses the growing market requirements for added performance and functionality.
- **Continuous motion sensing,** signal processing and event/ motion detection Low-Power DigiPyro. Only upon detection of motion, per programmed settings, the Low-Power DigiPyro signals the micro controller to wake up.



| PYQ 1548 | | | | | | | |
|----------------------|----------|------|-----------|----------------|----------------------|----------------------------------|--|
| Main Parameter | Symbol | Min. | Typ. | Max. | Unit | Remarks | |
| Responsivity | | 5,4 | 6,4 | | kV/W | f = 1 Hz | |
| Match | | | 5 | 10 | % | | |
| Noise | | | 40 | 160 | μV_{pp} | | |
| Operation Data | | | | | | | |
| Operating Voltage | V_{DD} | 1,8 | 3,0 | 3,6 | V | | |
| Supply Current | I_{DD} | | 3,0 | 3,5 | μA | $V_{DD} = 1,8V, \text{ No Load}$ | |
| ADC Data | | | | | | | |
| ADC Resolution | | | 14 | | Bits | Max. Count = $2^{14} - 1$ | |
| PIR ADC Sensitivity | | | 6,5 | | $\mu V/\text{Count}$ | | |
| Output Range | | 511 | | $2^{14} - 511$ | Counts | | |
| LPF Cutoff Frequency | f_l | | 7 | | Hz | | |
| HPF Cutoff Frequency | f | | 0,4 / 0,2 | | Hz | Selectable | |