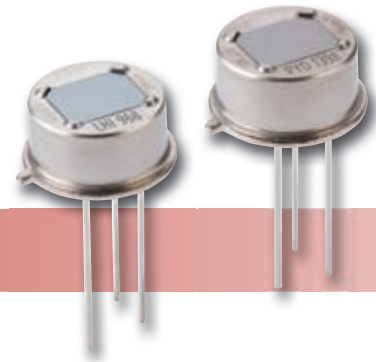


Pyroelectric, Dual-Element Detectors For Intrusion Alarms



LHi 968, PYD 1398 – High-End Pyro

Applications

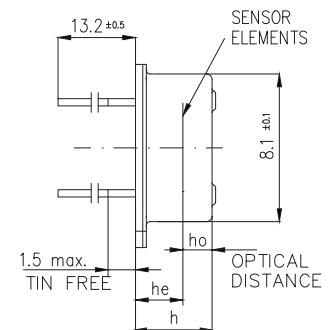
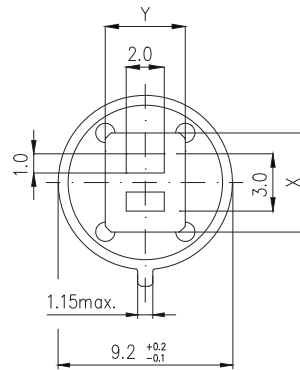
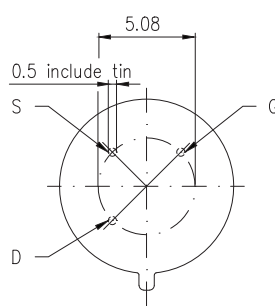
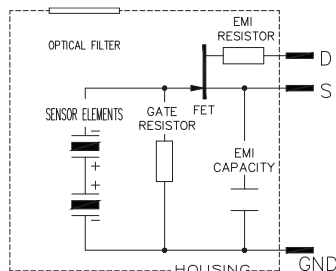
- Intrusion Alarms
- High-end Motion Sensors

Features and Benefits

- TO-5 metal housing
- Improved EMI protection
- Reduced (WLI)

Product Description

The analog LHi 968 series with Dual Element configuration is performance-proven top of the line product in high-end applications. The LHi 968 design provides for a reduced sensitivity to EMI and excellent White Light Immunity (WLI). PYD 1398 offers a higher level of RF immunity and is optionally available with grading for lower white light sensitivity.



LHi 968 and PYD 1398

| Parameter | Symbol | LHi 968 | PYD 1398 | Unit | Remarks |
|---------------------------|-----------|------------|------------|-------------------------|-----------------------|
| Responsivity, min. | R_{min} | 3,3 | 3,3 | kV/W | f = 1 Hz |
| Responsivity, typ. | R | 4 | 4 | kV/W | f = 1 Hz |
| Match, max. | M_{max} | 10 | 10 | % | |
| Noise, max. | N_{max} | 50 | 50 | μV_{pp} | 0,4...10Hz/20°C |
| Noise, typ. | N | 20 | 20 | μV_{pp} | 0,4...10Hz/20°C |
| spec. Detectivity | D^* | 19 | 19 | $10^7 cm^* \sqrt{Hz/W}$ | 1Hz / 1Hz BW/20°C |
| Field of View, horizontal | FoV | 100° | 100° | | unobstructed |
| Field of View, vertical | | 100° | 100° | | unobstructed |
| Source Voltage | | 0,2...1,5 | 0,2...1,5 | V | 47 kΩ, 20°C, VDD=10V |
| Operating Voltage | | 2,0...10 | 2,0...10 | V | 47 kΩ, 20°C |
| EMI performance | | ** | ** | | |
| White Light performance | | ** | *** | | Excelitas test set up |
| Height | h | 4,2 | 4,2 | mm | |
| Optical Element Location | he /ho | 2,6 / 0,95 | 2,6 / 0,95 | mm | |
| Filter Size | X x Y | 5,2 x 4,2 | 5,2 x 4,2 | mm | |