

## Point Contact Detector 10 MHz to 18 GHz

Rev. V5

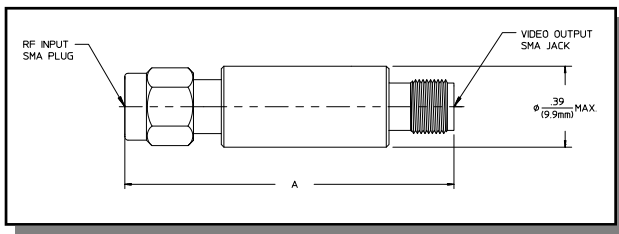
### Features

- Broadband Frequency Ranges
- No Bias Required
- Flat Frequency Response
- Passivated Stainless Steel Finish

### Specifications

| Parameter          | Specification   |
|--------------------|---|
| Flatness (Maximum) | ± 0.75 dB, 10 MHz to 4 GHz<br>± 1.25 dB, 4 MHz to 8 GHz<br>± 1.5 dB, 10 MHz to 12 GHz<br>± 2.5 dB, 10 MHz to 18 GHz |
| VSWR (Typical)     | 1.7:1, 10 MHz to 4 GHz<br>2.7:1, 10 MHz to 8 GHz<br>3.5:1, 10 MHz to 12 GHz<br>4.0:1, 10 MHz to 18 GHz              |
| Maximum Power      | 100 mW  |
| Output Polarity    | Positive <sup>4</sup>   |
| Video Resistance   | 6 k Ohms Typical <sup>2</sup>   |
| Temperature Range  | -65°C to +100°C   |

### Mechanical Outline Drawing



| Detector Part Number | Frequency Range <sup>1</sup> (GHz) | Open Circuit Voltage Sensitivity <sup>2</sup> (mV/mW) Min. | Tangential Sensitivity <sup>3</sup> (-dBm) Min. | Output Capacitance (pF) Typical | Dimension A |      |
|----------------------|------------------------------------|--|---|---------------------------------|-------------|------|
|                      |                                    |  |   |                                 | Inches      | mm   |
| 2087-6001-00         | 10 MHz to 4 GHz                    | 400  | 45  | 12                              | 1.55        | 39.4 |
|                      | 10 MHz to 8 GHz                    | 500  | 45  | 12                              | 1.55        | 39.4 |
|                      | 10 MHz to 12 GHz                   | 700  | 45  | 12                              | 1.55        | 39.4 |
|                      | 10 MHz to 18 GHz                   | 800  | 45  | 12                              | 1.55        | 39.4 |

1. Usable to 20 GHz
2. For RF power levels below -20 dBm, and with an open circuit load.
3. With video amplifier of 1 MHz bandwidth and 2 dB noise figure.
4. For Negative Output change suffix to -00.