# 2087-6001-13

## Point Contact Detector 10 MHz to 18 GHz



Rev. V5

#### Features

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

# **Mechanical Outline Drawing**



## **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   |  |  |

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

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