## Point Contact Detector <br> 10 MHz to 18 GHz

## Features

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


## Mechanical Outline Drawing



## Specifications

| Parameter | Specification |
| :---: | :--- |
| Flatness (Maximum) | $\pm 0.75 \mathrm{~dB}, 10 \mathrm{MHz}$ to 4 GHz |
|  | $\pm 1.25 \mathrm{~dB}, 4 \mathrm{MHz}$ to 8 GHz |
|  | $\pm 1.5 \mathrm{~dB}, 10 \mathrm{MHz}$ to 12 GHz |
|  | $\pm 2.5 \mathrm{~dB}, 10 \mathrm{MHz}$ to 18 GHz |
| VSWR (Typical) | $1.7: 1,10 \mathrm{MHz}$ to 4 GHz |
|  | $2.7: 1,10 \mathrm{MHz}$ to 8 GHz |
|  | $3.5: 1,10 \mathrm{MHz}$ to 12 GHz |
|  | $4.0: 1,10 \mathrm{MHz}$ to 18 GHz |
| Maximum Power | 100 mW |
| Output Polarity | Negative ${ }^{4}$ |
| Video Resistance | $6 \mathrm{k} \mathrm{Ohms} \mathrm{Typical}{ }^{2}$ |
| Temperature Range | $-65^{\circ} \mathrm{C}$ to $+100^{\circ} \mathrm{C}$ |


| Detector Part Number | Frequency Range ${ }^{1}$ (GHz) | Open Circuit Voltage Sensitivity ${ }^{2}$ (mV/mW) Min. | Tangential Sensitivity ${ }^{3}$ (-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 Positive Output change suffix to -13.
[^0]Visit www.macomtech.com for additional data sheets and product information.

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