

## Point Contact Diodes: 1N Series

## X Band Point Contact Mixer Diodes

**Description**

This **MicroMetrics** 1N series of Point Contact Mixer diodes is designed for applications through X-Band. These diodes employ epitaxial silicon optimized for low noise figure and wide bandwidth and are specifically designed for use in stripline, microstrip and coaxial environments. Each device in this series is in an axial lead glass package.

**Applications**

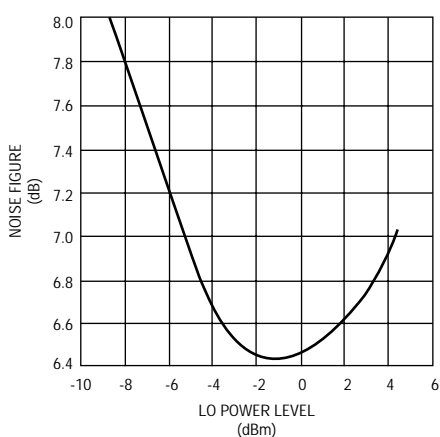
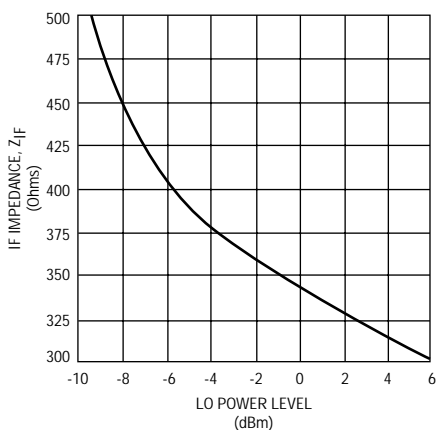
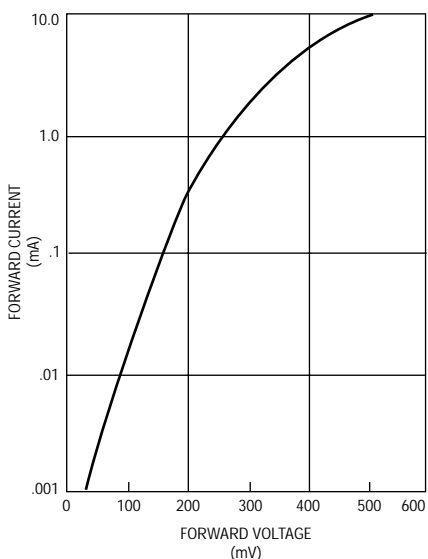
This 1N series of Point Contact Mixers is suitable for use in waveguide, coaxial and stripline applications.

**Features**

- Mechanical Reliability
- Low Noise Figure
- Wide Bandwidth

**Packaging**

- Axial Lead Glass

**Typical Performance**

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## Electrical Characteristics

Noise Figure 3.060 GHz LO = 1.0 mW RI = 100 Ohms MAX (dB)	VSWR 3.060 GHz LO = 1.0 mW RI = 100 Ohms MAX (Ratio)	IF Impedance 3.060 GHz LO = 1.0 mW RI = 100 Ohms MIN/MAX (ohms)	Conversion Loss 3.060 GHz LO = 1.0 mW RI = 100 Ohms MAX (dB)	Case Style	Part Number
8.5	-	300 - 500	-	CS85	1N831
7.0	-	300 - 500	-	CS85	1N831A
6.5	-	300 - 500	-	CS85	1N831B
6.0	-	300 - 500	-	CS85	1N831C

Noise Figure 9.375 GHz LO = 1.0 mW RI = 100 Ohms MAX (dB)	VSWR 9.375 GHz LO = 1.0 mW RI = 100 Ohms MAX (Ratio)	IF Impedance 9.375 GHz LO = 1.0 mW RI = 100 Ohms MIN/MAX (Ohms)	Conversion Loss 9.375 GHz LO = 1.0 mW RI = 100 Ohms	Case Style	Part Number
9.5	-	250 - 550	-	CS85	1N832
7.5	-	250 - 550	-	CS85	1N832A
7.0	-	250 - 550	-	CS85	1N832B
6.5	-	250 - 550	-	CS85	1N832C

## Maximum Ratings

Operating Temperature	-55°C to + 150°C
Storage Temperature	-65°C to + 200°C

