

**Point Contact Diodes: 1N Series**

# Ka Band Point Contact Mixer Diodes

**Description**

This **MicroMetrics** 1N series of Point Contact Mixer diodes is designed for applications through KA-Band. Each device in this series is in a coaxial package specially designed for low noise figure performance. These diodes employ epitaxial silicon optimized for low noise figure and uniformity. These devices are suitable for use in waveguide, coaxial and stripline applications.

**Applications**

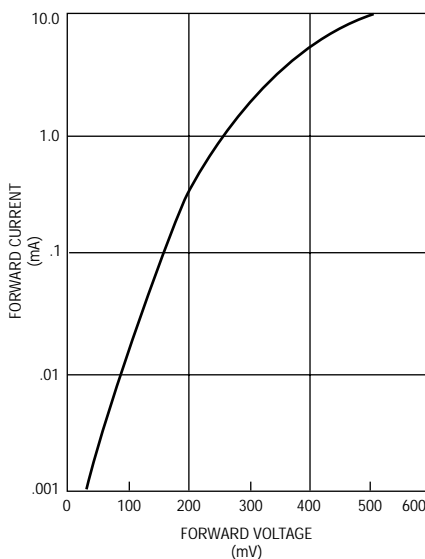
This 1N Series of Point Contact Mixers are suitable for use in waveguide, coaxial and stripline applications

**Features**

- Mechanical Reliability
- Low Noise Figure

**Packaging**

- Coaxial

**Typical Performance**

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## Electrical Characteristics

Noise Figure 34.860 GHz LO = 1.0 mW RI = 100 Ohms MAX (dB)	VSWR 34.860 GHz LO = 1.0 mW RI = 100 Ohms MAX (Ratio)	IF Impedance 34.860 GHz LO = 1.0 mW RI = 100 Ohms MIN/MAX (Ohms)	Conversion Loss 34.860 GHz LO = 1.0 mW RI = 100 Ohms MAX (dB)	Case Style	Part Number
-	-	350 - 800	-	CS103	1N53
11.0	-	350 - 800	-	CS103	1N53A
10.0	1.6	350 - 800	9.0	CS103	1N53B
9.5	1.6	350 - 800	8.5	CS103	1N53C
8.5	1.6	350 - 800	7.5	CS103	1N53D

Noise Figure 16.0 GHz LO = 1.0 mW RI = 100 Ohms MAX (dB)	VSWR 16.0 GHz LO = 1.0 mW RI = 100 Ohms MAX (Ratio)	IF Impedance 16.0 GHz LO = 1.0 mW RI = 100 Ohms MIN/MAX (Ohms)	Conversion Loss 16.0 GHz LO = 1.0 mW RI = 100 Ohms MAX (dB)	Case Style	Part Number
12.0	-	325 - 650	-	CS102	1N78
12.0	-	325 - 650	-	CS102	1N78A
10.0	1.6	325 - 650	9.0	CS102	1N78B
9.5	1.6	325 - 650	8.5	CS102	1N78C
8.5	1.6	325 - 650	7.5	CS102	1N78D
8.0	1.5	325 - 650	7.0	CS102	1N78E
7.5	1.5	325 - 650	6.5	CS102	1N78F
7.0	1.5	325 - 650	6.0	CS102	1N78G

## Maximum Ratings

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

