

Schottky Diodes: MNH 300 Series

High Barrier Schottky Mixer Diodes

Description

The **MicroMetrics** MNH 300 series of High Barrier Schottky diodes are metal semiconductor junction devices that have a typical short reverse recovery time. This allows their use at high microwave frequencies when the performance of the n-type may be reduced. The forward I-V of schottky diodes is determined by the junction metal used. For every different metal selection there is a different forward voltage characteristic or "Barrier Height". These devices are best suited for applications through 26 GHz.

Applications

High Barrier Schottky Mixer diodes are ideally suited for use in mixers, doublers, modulators and high speed switches.

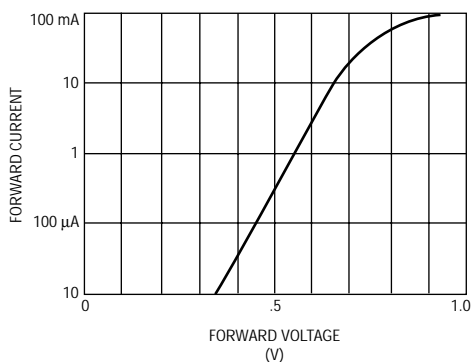
Features

- Multi-Junction Chips
- Low 1/F Noise
- Small Junction Capacitance

Packaging

- Chip, Glass, Ceramic, Beam Lead

Typical Performance



Electrical Characteristics

Breakdown Voltage @10 μ A MIN (V)	Forward Voltage @1mA MAX (V)	Junction Capacitance @0 Vdc 1MHz TYP (pF)	Series Resistance @5 mA TYP (Ohms)	Tangential Signal Sensitivity TYP (dB)	Part Number
4.0	0.475	0.08	10.0	-52	MNH300
4.0	0.475	0.1	10.0	-50	MNH301
4.0	0.475	0.12	8.0	-48	MNH302
4.0	0.475	0.14	6.0	-45	MNH303
5.0	0.5	0.08	10.0	-52	MNH304
5.0	0.5	0.1	10.0	-50	MNH305
5.0	0.5	0.12	8.0	-48	MNH306
5.0	0.5	0.14	6.0	-45	MNH307
6.0	0.525	0.08	10.0	-52	MNH308
6.0	0.525	0.1	10.0	-50	MNH309
6.0	0.525	0.12	8.0	-48	MNH310
6.0	0.525	0.14	6.0	-45	MNH311
8.0	0.55	0.08	10.0	-52	MNH312
8.0	0.55	0.1	10.0	-50	MNH313
8.0	0.55	0.12	8.0	-48	MNH314
8.0	0.55	0.14	6.0	-45	MNH315

Maximum Ratings

Operating Temperature	-55°C to + 150°C
Storage Temperature	-65°C to + 200°C
Power Dissipation @25°C	250mW
(derate linearly to zero at 150°C)	

