

## Schottky Diodes: MCM 500 Series

# Medium Barrier Schottky Ring Quads

**Description**

The **MicroMetrics** MCM 500 series of Medium Barrier Ring Quads consists of four closely matched diodes connected in a ring configuration. The diodes are formed monolithically providing close matching of capacitance, forward voltage and series resistance. These ring quads are available in our case style 26.

**Applications**

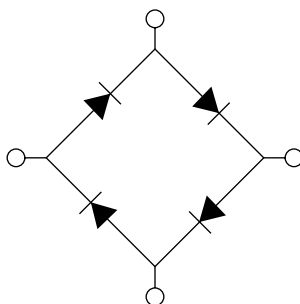
The Medium Barrier Schottky Ring Quads are ideally suited for use in doublers, modulators and as double balance mixers.

**Features**

- Low Junction Capacitance
- Monolithic Construction
- Low Series Resistance

**Packaging**

- CS 26

**Diode Ring Circuit**

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## Electrical Characteristics

| Breakdown Voltage<br>@10 $\mu$ A<br>MIN<br>(V) | Forward Voltage<br>@1 mA<br>MAX<br>(V) | Delta Forward Voltage<br>@1 mA MAX<br>(mV) | Total Capacitance<br>@0 Vdc 1 MHz<br>TYP<br>(pF) | Series Resistance<br>@5 mA<br>TYP<br>(Ohms) | Part Number |
|--|--|--|--|---|-------------|
| 3.0  | 0.35                                   | 15   | 0.08   | 8   | MCM500      |
| 3.0  | 0.35                                   | 15   | 0.1  | 8   | MCM501      |
| 3.0  | 0.4                                    | 15   | 0.12   | 12  | MCM502      |
| 3.0  | 0.4                                    | 15   | 0.14   | 12  | MCM503      |
| 3.0  | 0.45                                   | 15   | 0.18   | 18  | MCM504      |
| 3.0  | 0.45                                   | 15   | 0.2  | 18  | MCM505      |

## 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) |                  |

