

Commercial Diodes: MSV-1100 and 1200 Series

Hyperabrupt Varactors

Single and Common Cathode

Portable Applications

Description

The **MicroMetrics** Hyperabrupt Varactors come in a wide variety of capacitance values and high capacitance ratios. These devices are available in single junction, common anode and common cathode configurations.

Features

- Available in tape and reel
- Small and high volume commercial applications
- Wide selection of capacitance ranges

Packaging

- SOT 23, SOD 323



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Electrical Characteristics

| $C_t @ 1 \text{ V (pF)}$ | | $C_t 1 \text{ V}/C_t 3 \text{ V (pF)}$ | | $C_t 1 \text{ V}/C_t 6 \text{ V (pF)}$ | | $R_s @ 50 \text{ MHz } (\Omega)$ | $Q @ 3 \text{ V, } 50 \text{ MHz}$ | Part Number ¹ |
|--------------------------|-------|--|------|--|------|----------------------------------|------------------------------------|--------------------------|
| MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | |
| 3.00 | 3.60 | 1.40 | 1.90 | 2.60 | 3.30 | 1.20 | 1200 | MSV1104-33-323 |
| 3.00 | 3.60 | 1.40 | 1.90 | 2.60 | 3.30 | 1.20 | 1200 | MSV1204-33-001 |
| 3.00 | 3.60 | 1.40 | 1.90 | 2.60 | 3.30 | 1.20 | 1200 | MSV1204-133-004 |
| 5.85 | 7.15 | 1.60 | 2.00 | 2.80 | 3.40 | 0.80 | 1000 | MSV1104-34-323 |
| 5.85 | 7.15 | 1.60 | 2.00 | 2.80 | 3.40 | 0.80 | 1000 | MSV1204-34-001 |
| 5.85 | 7.15 | 1.60 | 2.00 | 2.80 | 3.40 | 0.80 | 1000 | MSV1204-134-004 |
| 10.35 | 12.65 | 1.60 | 2.00 | 2.90 | 3.40 | 0.60 | 750 | MSV1104-35-323 |
| 10.35 | 12.65 | 1.60 | 2.00 | 2.90 | 3.40 | 0.60 | 750 | MSV1204-35-001 |
| 10.35 | 12.65 | 1.60 | 2.00 | 2.90 | 3.40 | 0.60 | 750 | MSV1204-135-004 |
| 15.50 | 18.50 | 1.60 | 2.00 | 3.00 | 3.50 | 0.50 | 700 | MSV1104-36-323 |
| 15.50 | 18.50 | 1.60 | 2.00 | 3.00 | 3.50 | 0.50 | 700 | MSV1204-36-001 |
| 15.50 | 18.50 | 1.60 | 2.00 | 3.00 | 3.50 | 0.50 | 700 | MSV1204-136-004 |
| 45.00 | 54.00 | 1.60 | 2.00 | 3.00 | 3.50 | 0.25 | 500 | MSV1204-37-001 |

1. 3 digit part number suffix indicates configuration. Refer to case styles.

Reverse Breakdown Voltage, V_{BR} (10 μA): 15 V MIN

Reverse Leakage Current, I_R (12 V): 50 nA MAX

