

Commercial Diodes: MSV-1200 Series

Hyperabrupt Varactors

Single and Common Cathode Oscillator Applications (VCXOs and TCXOs)

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

Datasheet.Direc



Electrical Characteristics

$C_t @ 1\text{ V (pF)}$		$C_t @ 2.5\text{ V (pF)}$		$C_t @ 4\text{ V (pF)}$		$Q @ 4\text{ V, } 50\text{ MHz}$	Part Number ¹
MIN	TYP	MIN	TYP	TYP	MAX	MIN	
95.0	100	40.0	65.0	20.0	25.0	80	MSV1204-11-001
42.0	50.0	18.0	27.0	09.0	12.0	150	MSV1204-12-001
17.0	22.0	08.5	10.5	04.0	05.5	200	MSV1204-13-001
14.5	16.0	06.5	07.8	03.0	04.8	300	MSV1204-14-001
8.7	09.5	04.3	5.50	02.0	02.9	350	MSV1204-15-001
85.0	–	–	–	15.0	30.0	500*	MSV1201-97-001

* $Q @ 2\text{ V, } F = 1\text{ MHz}$ 1. 3 digit part number suffix indicates configuration. Refer to case styles.

$C_t @ 2.5\text{ V (pF)}$		$C_t 1\text{ V}/C_t 2.5\text{ V (pF)}$		$C_t 2.5\text{ V}/C_t 4\text{ V (pF)}$		$Q @ 4\text{ V, } 50\text{ MHz}$	Part Number ¹
MIN	MAX	MIN	MAX	MIN	MAX	MIN	
18.0	27.0	01.5	02.0	1.50	2.00	150	MSV1204-22-001
09.0	13.0	01.5	02.0	1.50	2.00	200	MSV1204-23-001
06.0	80.0	01.5	02.0	1.50	2.00	300	MSV1204-24-001
04.2	05.6	01.5	02.0	1.50	2.00	350	MSV1204-25-001

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

Reverse Breakdown Voltage, V_{BR} (10 μA): 12 V MIN

Reverse Leakage Current, I_R (8 V): 50 nA MAX

