

Commercial Diodes: MSS-1000 and 3000 Series

High Frequency Mixer/Detectors

Description

The **MicroMetrics** surface mount plastic schottky barrier diodes are designed for commercial applications. MicroMetrics offers a wide variety of specifications and configurations. Please see configuration table and consult factory for availability.

Features

- Available in tape and reel
- Small and high volume commercial applications
- Low series resistance
- Low capacitance.

Packaging

- SOT 23, SOD 323, SOT 143

Electrical Characteristics

V_b @ 10 μ A V DC MIN	V_f @ 1 mA mV MAX	R_s @ 10 mA Ω MAX	C_t @ 0 V, 1 GHz pF MAX	Part Number ⁴
4	250-450	12	1.00	Single MSS3348-001 MSS1043-001 MSS3989-001 ^{1,2}
2	200-300	10	0.60	
2	250-350	15	0.25	
4	250-450	12	1.00	Series Pair² MSS3921-005 MSS1046-005 MSS3988-005 ¹
2	200-300	10	0.60	
4	250-350	15	0.25	
4	250-450	12	1.00	Common Cathode Pair² MSS3349-004
4	250-450	12	1.00	Common Anode Pair² MSS3350-003
-	200-300	10	0.60	Four Diode Quad² MSS3990-021 MSS3992-023 MSS3996-023 MSS3999-023
-	200-300	10	0.60	
-	200-300	10	0.60	
-	200-300	10	0.60	

- Usable up to 12.0 GHz
- Matching Criteria for Pairs and Quads: 10 MV MAX @ 1mA
- Test Conditions P = 30 dBm, RL > 1M Ω , F = 2.5 GHz
- 3 digit part number suffix indicates configuration. Refer to case styles.

V_b @ 10 μ A V DC MIN	V_f V DC MAX				Reverse Current nA MAX			C_t @ 0 V 1MHz (pF) MAX	Part Number ²
	1 mA	10 mA	15 mA	35 mA	1 V	15 V	50 V		
70	0.55	-	1.00	-	-	-	200	2	Single MSS-1526-50-001 MSS-1526-30-001 MSS-1526-10-001
20	0.40	-	-	1.00	-	500	-	1	
8	0.34	0.45	-	-	100	-	-	1	
70	0.55	-	1.00	-	-	-	200	2	Series Pair MSS-1527-50-005 MSS-1527-30-005 MSS-1527-10-005
20	0.40	-	-	1.00	-	500	-	1	
8	0.34	0.45	-	-	100	-	-	1	
70	0.55	-	1.00	-	-	-	200	2	Common Anode Pair¹ MSS-1528-50-003 MSS-1528-30-003 MSS-1528-10-003
20	0.40	-	-	1.00	-	500	-	1	
8	0.34	0.45	-	-	100	-	-	1	
70	0.55	-	1.00	-	-	-	200	2	Common Cathode Pair¹ MSS-1529-50-004 MSS-1529-30-004 MSS-1529-10-004
20	0.40	-	-	1.00	-	500	-	1	
8	0.34	0.45	-	-	100	-	-	1	
7	0.55	-	1.00	-	-	-	200	2	Unconnected Pair MSS-3993-50-016 MSS-3993-30-016 MSS-3993-10-016 MSS-3991-50-015 MSS-3991-30-015 MSS-3991-10-015
20	0.40	-	-	1.00	-	500	-	1	
8	0.34	0.45	-	-	100	-	-	1	
70	0.55	-	1.00	-	-	-	200	1	
20	0.40	-	-	1.00	-	500	-	1	
8	0.34	0.45	-	-	100	-	-	1	

- Matching Criteria for Pairs and Quads: 10 MV MAX @ 1mA
- 2, 3 digit part number suffix indicates configuration. Refer to case styles.

V_b @ 10 μ A V DC MIN	V_f @ 1 μ A V DC MAX	V_f @ 15 μ A V DC MAX	I_r @ 50 V nA MAX	Part Number ¹
65	0.55	1.00	200	MSS1530-50-323

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

