

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 $\mu$ A V DC MIN	$V_f$ @ 1 mA mV MAX	$R_s$ @ 10 mA $\Omega$ MAX	$C_t$ @ 0 V, 1 GHz pF MAX	Part Number <sup>4</sup>
4	250-450	12	1.00	<b>Single</b> MSS3348-001 MSS1043-001 MSS3989-001 <sup>1,2</sup>
2	200-300	10	0.60	
2	250-350	15	0.25	
4	250-450	12	1.00	<b>Series Pair<sup>2</sup></b> MSS3921-005 MSS1046-005 MSS3988-005 <sup>1</sup>
2	200-300	10	0.60	
4	250-350	15	0.25	
4	250-450	12	1.00	<b>Common Cathode Pair<sup>2</sup></b> MSS3349-004
4	250-450	12	1.00	<b>Common Anode Pair<sup>2</sup></b> MSS3350-003
-	200-300	10	0.60	<b>Four Diode Quad<sup>2</sup></b> MSS3990-021 MSS3992-023 MSS3996-023 MSS3999-023
-	200-300	10	0.60	
-	200-300	10	0.60	
-	200-300	10	0.60	

1. Usable up to 12.0 GHz  
 2. Matching Criteria for Pairs and Quads: 10 MV MAX @ 1mA  
 3. Test Conditions P = 30 dBm, RL > 1M $\Omega$ , F = 2.5 GHz  
 4. 3 digit part number suffix indicates configuration. Refer to case styles.

$V_b$ @ 10 $\mu$ A V DC MIN	$V_f$ V DC MAX				Reverse Current nA MAX			$C_t$ @ 0 V 1MHz (pF) MAX	Part Number <sup>2</sup>
	1 mA	10 mA	15 mA	35 mA	1 V	15 V	50 V		
70	0.55	-	1.00	-	-	-	200	2	<b>Single</b> 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	<b>Series Pair</b> 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	<b>Common Anode Pair<sup>1</sup></b> 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	<b>Common Cathode Pair<sup>1</sup></b> 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	<b>Unconnected Pair</b> 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	

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 $\mu$ A V DC MIN	$V_f$ @ 1 $\mu$ A V DC MAX	$V_f$ @ 15 $\mu$ A V DC MAX	$I_r$ @ 50 V nA MAX	Part Number <sup>1</sup>
65	0.55	1.00	200	MSS1530-50-323

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

