

# SCHOTTKY BARRIER MIXER DIODES

<b>LOW BARRIER (N-TYPE)</b>						
FREQUENCY BAND	TYPE NUMBER	NF <sup>(1)</sup>	Z <sub>IF</sub> <sup>(2)</sup>		VSWR	TEST FREQUENCY MHz
		(dB)	(OHMS)			
		MAX	MIN	MAX	MAX	
S	AML3001	5.5	100	300	1.7	3060
S	AML3002	6.0	100	300	1.8	3060
S	AML3003	6.5	100	300	2.0	3060
X	AML9001	5.5	200	500	1.6	9375
X	AML9002	6.0	200	500	1.6	9375
X	AML9003	6.5	200	500	1.6	9375
X	AML9004	7.0	200	500	1.6	9375
K <sub>μ</sub>	AML1601	6.0	200	500	1.6	16000
K <sub>μ</sub>	AML1602	6.5	200	500	1.6	16000
K <sub>μ</sub>	AML1603	7.0	200	500	1.6	16000
K <sub>μ</sub>	AML1604	7.5	200	500	1.6	16000
K <sub>α</sub>	AML3501	7.0	300	700	—	34865
K <sub>α</sub>	AML3502	7.5	300	700	—	34865
K <sub>α</sub>	AML3503	8.0	300	700	—	34865
K <sub>α</sub>	AML3504	9.0	300	700	—	34865
K <sub>α</sub>	AML3505	10.0	300	700	—	34865

<b>MEDIUM BARRIER (N-TYPE)</b>						
FREQUENCY BAND	TYPE NUMBER	NF <sup>(1)</sup>	Z <sub>IF</sub> <sup>(2)</sup>		VSWR	TEST FREQUENCY MHz
		(dB)	(OHMS)			
		MAX	MIN	MAX	MAX	
S	AMM3001	5.5	150	400	1.7	3060
S	AMM3002	6.0	150	400	1.8	3060
S	AMM3003	6.5	150	400	2.0	3060
S	AMM3004	7.0	150	400	2.0	3060
X	AMM9001	6.0	200	450	1.6	9375
X	AMM9002	6.5	200	450	1.6	9375
X	AMM9003	7.0	200	450	1.6	9375
X	AMM9004	7.5	200	450	1.8	9375
X	AMM9005	8.0	200	450	2.0	9375
K <sub>μ</sub>	AMM1601	6.5	250	600	1.6	16000
K <sub>μ</sub>	AMM1602	7.0	250	600	1.8	16000
K <sub>μ</sub>	AMM1603	7.5	250	600	2.0	16000

<b>HIGH BARRIER (N-TYPE)</b>						
FREQUENCY BAND	TYPE NUMBER	NF <sup>(1)</sup>	Z <sub>IF</sub> <sup>(2)</sup>		VSWR	TEST FREQUENCY MHz
		(dB)	(OHMS)			
		MAX	MIN	MAX	MAX	
S	AMH3001	5.0	250	450	1.6	3060
S	AMH3002	5.5	250	450	1.6	3060
S	AMH3003	6.0	250	450	1.8	3060
S	AMH3004	6.5	250	450	2.0	3060
X	AMH9001	6.0	250	450	1.6	9375
X	AMH9002	6.5	250	450	1.6	9375
X	AMH9003	7.0	250	450	1.8	9375
K <sub>μ</sub>	AMH1601	6.5	250	600	1.6	16000
K <sub>μ</sub>	AMH1602	7.0	250	600	1.8	16000

<b>LOW BARRIER (P-TYPE)</b>						
FREQUENCY BAND	TYPE NUMBER	NF <sup>(1)</sup>	Z <sub>IF</sub> <sup>(2)</sup>		VSWR	TEST FREQUENCY MHz
		(dB)	(OHMS)			
		MAX	MIN	MAX	MAX	
S	AMP3001	5.5	100	250	1.6	3060
S	AMP3002	6.0	100	250	1.8	3060
S	AMP3003	6.5	100	250	2.0	3060
X	AMP9001	6.0	100	250	1.6	9375
X	AMP9002	6.5	100	250	1.6	9375
X	AMP9003	7.0	100	250	1.8	9375
K <sub>μ</sub>	AMP1601	6.5	150	500	1.6	16000
K <sub>μ</sub>	AMP1602	7.0	150	500	1.8	16000

**NOTES:**

- NF<sub>IF</sub> = 1.5 dB; I<sub>F</sub> = 30 MHz; R<sub>L</sub> = 100 ohms; L.O. = 1 MW (for low and medium barrier types); L.O. = 2.0 MW (for high barrier types); K<sub>α</sub>-Band NF is calculated.
- IF impedance is measured by modulating the specified test frequency with a 1000 Hz signal, R<sub>L</sub> = 22 ohms, at the specified incident power level.
- These diodes are available as matched pairs and are supplied in either forward pairs (M) or forward/reverse pairs (MR). The matching criteria is: ΔL<sub>c</sub> = 0.3 dB max  
ΔZ<sub>IF</sub> = 2.5 ohms, max
- When ordering add package style as a suffix to basic type number to denote desired package style; i.e. AML9002-44 is a 6.0 dB X-Band Low Barrier Mixer Diode in the -44 style package.
- All of the Schottky Barrier Mixer Diodes are available in chip form.

# SCHOTTKY BARRIER DETECTOR DIODES

## LOW BARRIER (N-TYPE)

FREQUENCY BAND	TYPE NUMBER	TSS <sup>(1)</sup> (dBm)	Z <sub>v</sub> <sup>(2)</sup> (KOHMS)		TEST FREQUENCY MHz
		MIN	MIN	MAX	
S	ADN3001	-48	1	2	3060
S	ADN3002	-50	1	2	3060
S	ADN3003	-55	1	2	3060
X	ADN9001	-50	1	2	10000
X	ADN9002	-52	1	2	10000
X	ADN9003	-55	1	2	10000
K <sub>μ</sub>	ADN1601	-48	1	2	16000
K <sub>μ</sub>	ADN1602	-50	1	2	16000
K <sub>μ</sub>	ADN1603	-52	1	2	16000

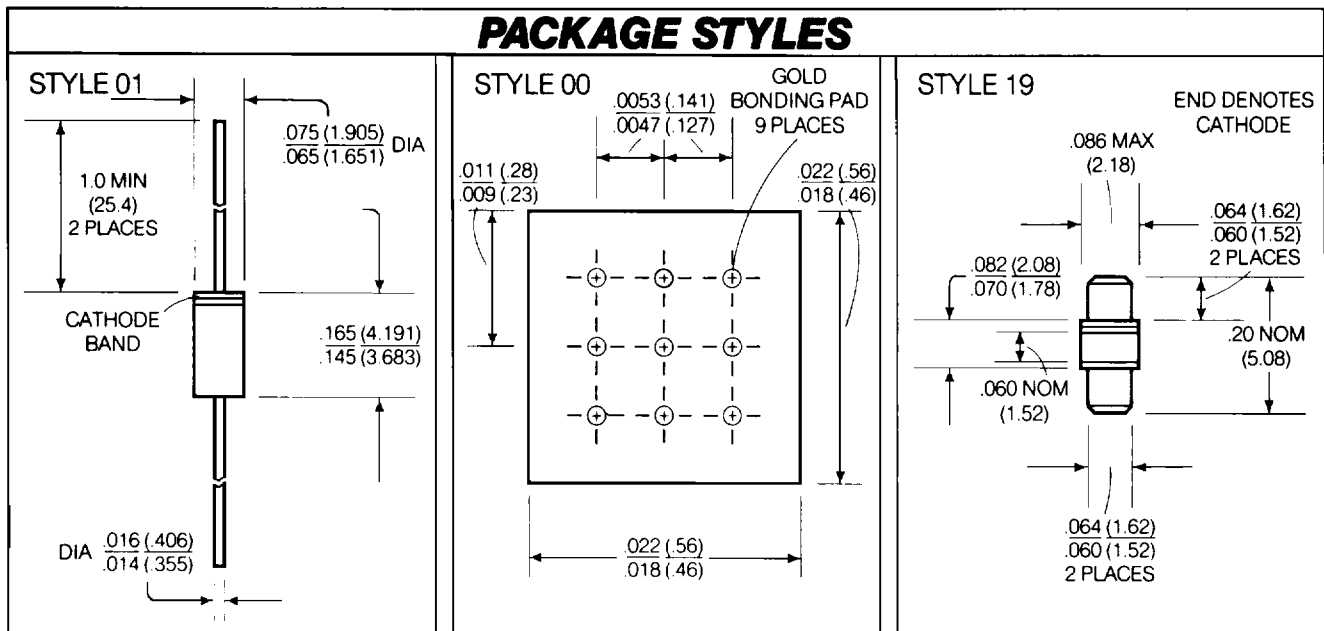
## LOW BARRIER (P-TYPE)

FREQUENCY BAND	TYPE NUMBER	TSS <sup>(1)</sup> (dBm)	Z <sub>v</sub> <sup>(2)</sup> (KOHMS)		TEST FREQUENCY MHz
		MIN	MIN	MAX	
X	ADP9001	-50	1.2	1.8	10000
X	ADP9002	-52	1.2	1.8	10000
X	ADP9003	-55	1.2	1.8	10000
K <sub>μ</sub>	ADP1601	-48	1.2	1.8	16000
K <sub>μ</sub>	ADP1602	-50	1.2	1.8	16000
K <sub>μ</sub>	ADP1603	-52	1.2	1.8	16000
K <sub>a</sub>	ADP3601	-47	1.0	2.0	36000
K <sub>a</sub>	ADP3602	-49	1.0	2.0	36000

### NOTES:

1. DC Bias is +20μA, Video Bandwidth=2 MHz.
2. DC Bias is +20μA, P(incident)=-30 dBm.
3. All of the Schottky Barrier Mixer Diodes are available in chip form.
4. When ordering add package style as a suffix to basic type number to denote desired package style; i.e. ADN3003-19 is a -55 dBm Low Barrier (N-Type); 5-Band detector diode in the -19 style package.

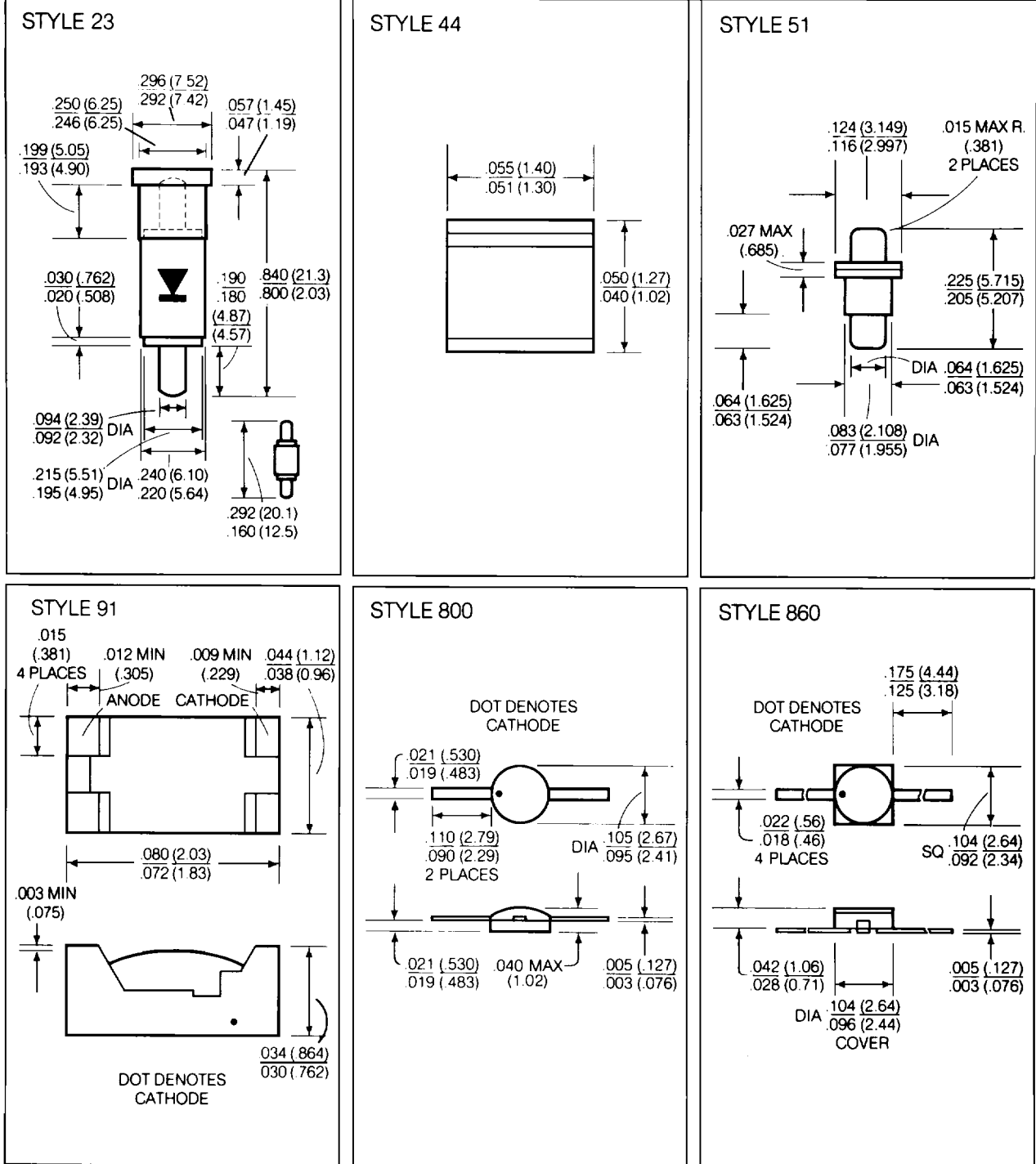
## PACKAGE STYLES



DIMENSIONS ABOVE ARE IN INCHES WITH MILLIMETERS IN PARENTHESES

# SCHOTTKY BARRIER MIXER DIODES

## PACKAGE STYLES



DIMENSIONS ABOVE ARE IN INCHES WITH MILLIMETERS IN PARENTHESES



THE ALTERNATIVE

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