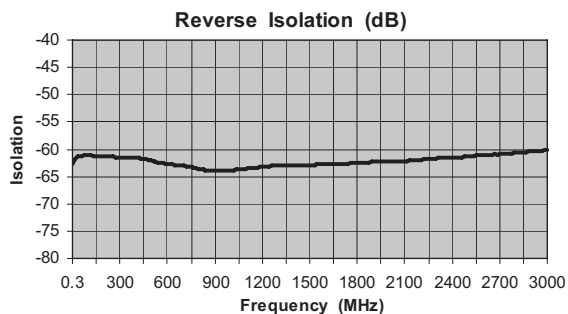
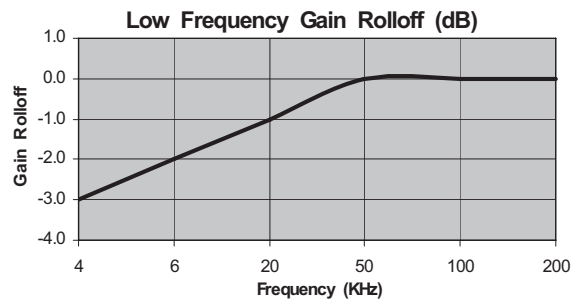
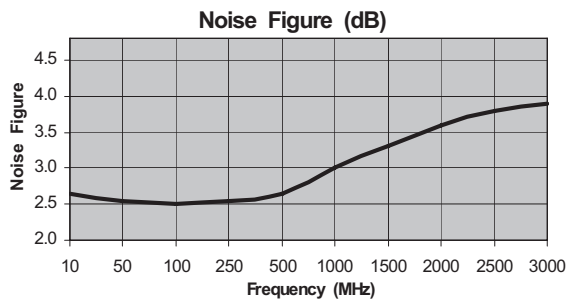
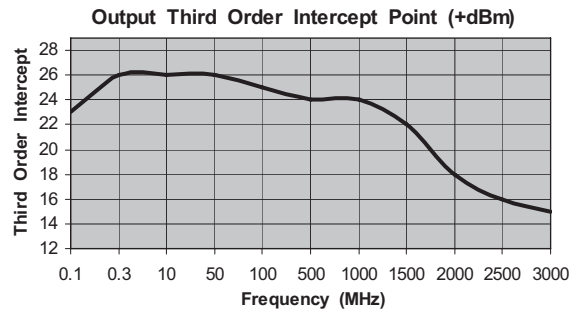
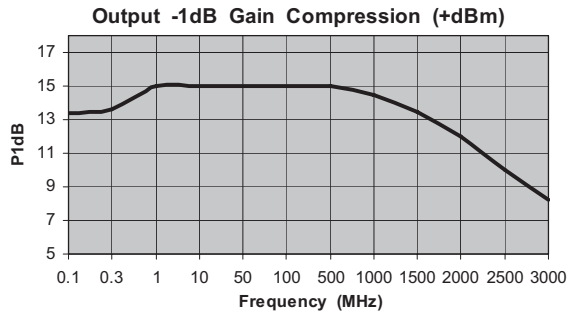
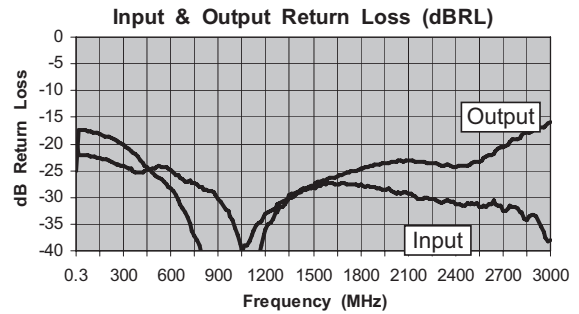
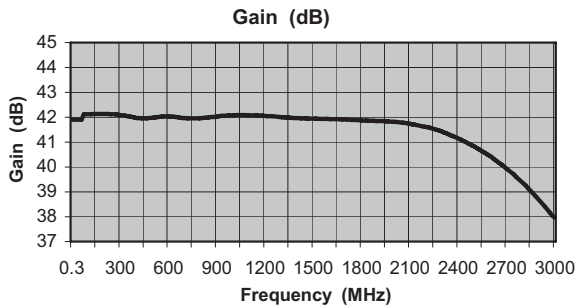


# MITEQ AM-1607-3000 SERIES AMPLIFIER

FREQUENCY (MHz)	MODEL NUMBER	GAIN (dB) (Min.)	VAR. (±dB) (Max.)	VSWR (Max.)	IMPED. IN/OUT (Ohms)	NOISE FIGURE (dB, Typ.)	P1 dB (dBm) (Typ.)	VOLTS	NOM. DC POWER (mA)	OUTLINE NO.
0.01-1000	AM-1607-1000	40	0.5	2.0:1	50/50	3.3	14	15	80	2
0.01-2000	AM-1607-2000	40	0.75	2.0:1	50/50	3.5	13	15	80	2
0.01-2500	AM-1607-2500	40	1.5	2.0:1	50/50	3.7	13	15	80	2
0.01-3000	AM-1607-3000	40	2.0	2.0:1	50/50	3.5	12	15	80	2



ISO 9001:2000 Certified • General Information • Warranty



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# MITEQ AM-1607-3000 SERIES AMPLIFIER

Freq. (MHz)	Gain (dB)
0.3	41.9
15	41.9
30	41.9
45	41.9
60	41.9
75	42.1
90	42.1
105	42.1
120	42.1
135	42.1
150	42.1
165	42.1
180	42.1
195	42.1
210	42.1
225	42.1
240	42.1
255	42.1
270	42.1
285	42.1
300	42.1
315	42.1
330	42.1
345	42.0
360	42.0
375	42.0
390	42.0
405	42.0
420	42.0
435	42.0
450	42.0
465	42.0
480	42.0
495	42.0
510	42.0
525	42.0
540	42.0
555	42.0
570	42.0
585	42.0
600	42.0
615	42.0
630	42.0
645	42.0
660	42.0
675	42.0
690	42.0
705	42.0
720	42.0
735	42.0
750	42.0
765	42.0
780	42.0
795	42.0
810	42.0
825	42.0
840	42.0
855	42.0

Freq. (MHz)	Gain (dB)
870	42.0
885	42.0
900	42.0
915	42.0
930	42.1
945	42.1
960	42.1
975	42.1
990	42.1
1005	42.1
1020	42.1
1035	42.1
1050	42.1
1065	42.1
1080	42.1
1095	42.1
1110	42.1
1125	42.1
1140	42.1
1155	42.1
1170	42.1
1185	42.1
1200	42.1
1215	42.0
1230	42.0
1245	42.0
1260	42.0
1275	42.0
1290	42.0
1305	42.0
1320	42.0
1335	42.0
1350	42.0
1365	42.0
1380	42.0
1395	42.0
1410	42.0
1425	42.0
1440	42.0
1455	42.0
1470	41.9
1485	41.9
1500	41.9
1515	41.9
1530	41.9
1545	41.9
1560	41.9
1575	41.9
1590	41.9
1605	41.9
1620	41.9
1635	41.9
1650	41.9
1665	41.9
1680	41.9
1695	41.9
1710	41.9
1725	41.9

Freq. (MHz)	Gain (dB)
1740	41.9
1755	41.9
1770	41.9
1785	41.9
1800	41.9
1815	41.9
1830	41.9
1845	41.9
1860	41.9
1875	41.9
1890	41.8
1905	41.8
1920	41.8
1935	41.8
1950	41.8
1965	41.8
1980	41.8
1995	41.8
2010	41.8
2025	41.8
2040	41.8
2055	41.8
2070	41.8
2085	41.8
2100	41.7
2115	41.7
2130	41.7
2145	41.7
2160	41.7
2175	41.6
2190	41.6
2205	41.6
2220	41.6
2235	41.6
2250	41.5
2265	41.5
2280	41.5
2295	41.4
2310	41.4
2325	41.4
2340	41.3
2355	41.3
2370	41.2
2385	41.2
2400	41.2
2415	41.1
2430	41.1
2445	41.0
2460	41.0
2475	40.9
2490	40.9
2505	40.8
2520	40.7
2535	40.7
2550	40.6
2565	40.6
2580	40.5
2595	40.4

Freq. (MHz)	Gain (dB)
2610	40.4
2625	40.3
2640	40.2
2655	40.2
2670	40.1
2685	40.0
2700	39.9
2715	39.9
2730	39.8
2745	39.7
2760	39.6
2775	39.5
2790	39.4
2805	39.3
2820	39.2
2835	39.1
2850	39.0
2865	38.9
2880	38.8
2895	38.7
2910	38.6
2925	38.5
2940	38.4
2955	38.3
2970	38.2
2985	38.0
3000	38.0



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# MITEQ AM-1607-3000 SERIES AMPLIFIER

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
0.3	-19	-25
15	-22	-17
30	-22	-17
45	-22	-17
60	-22	-17
75	-22	-18
90	-22	-18
105	-22	-18
120	-22	-18
135	-23	-18
150	-23	-18
165	-23	-18
180	-23	-19
195	-23	-19
210	-23	-19
225	-23	-19
240	-24	-19
255	-24	-19
270	-24	-20
285	-24	-20
300	-24	-20
315	-24	-20
330	-25	-21
345	-25	-21
360	-25	-22
375	-25	-22
390	-25	-22
405	-25	-23
420	-25	-24
435	-25	-24
450	-25	-24
465	-25	-25
480	-25	-25
495	-24	-26
510	-24	-26
525	-24	-26
540	-24	-27
555	-24	-27
570	-24	-28
585	-25	-28
600	-25	-28
615	-25	-29
630	-26	-30
645	-26	-31
660	-26	-31
675	-27	-32
690	-27	-33
705	-27	-34
720	-27	-35
735	-27	-36
750	-27	-37
765	-28	-38
780	-28	-39
795	-28	-41
810	-29	-44
825	-29	-44
840	-29	-44
855	-29	-45
870	-29	-46
885	-30	-49
900	-30	-51
915	-31	-50
930	-32	-53

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
945	-32	-56
960	-32	-56
975	-34	-48
990	-34	-45
1005	-36	-45
1020	-37	-43
1035	-39	-42
1050	-40	-40
1065	-43	-39
1080	-43	-39
1095	-45	-38
1110	-45	-37
1125	-44	-36
1140	-43	-35
1155	-41	-35
1170	-39	-34
1185	-37	-34
1200	-36	-33
1215	-35	-33
1230	-35	-32
1245	-34	-32
1260	-33	-32
1275	-33	-31
1290	-32	-31
1305	-32	-31
1320	-31	-31
1335	-31	-30
1350	-30	-30
1365	-30	-29
1380	-30	-29
1395	-29	-29
1410	-29	-29
1425	-29	-29
1440	-29	-28
1455	-29	-28
1470	-28	-28
1485	-28	-28
1500	-28	-28
1515	-28	-27
1530	-28	-27
1545	-28	-27
1560	-27	-27
1575	-28	-27
1590	-27	-27
1605	-27	-26
1620	-27	-26
1635	-28	-26
1650	-27	-26
1665	-28	-26
1680	-27	-26
1695	-27	-26
1710	-28	-25
1725	-28	-25
1740	-28	-25
1755	-28	-25
1770	-27	-25
1785	-28	-25
1800	-28	-25
1815	-28	-25
1830	-28	-24
1845	-28	-24
1860	-28	-24
1875	-28	-24

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
1890	-28	-24
1905	-28	-24
1920	-28	-24
1935	-28	-24
1950	-28	-24
1965	-29	-24
1980	-28	-24
1995	-29	-23
2010	-29	-23
2025	-29	-23
2040	-29	-23
2055	-29	-23
2070	-29	-23
2085	-29	-23
2100	-29	-23
2115	-29	-23
2130	-30	-23
2145	-30	-23
2160	-30	-23
2175	-30	-23
2190	-30	-23
2205	-30	-23
2220	-30	-24
2235	-30	-24
2250	-30	-24
2265	-30	-24
2280	-31	-24
2295	-31	-24
2310	-31	-24
2325	-31	-24
2340	-31	-24
2355	-31	-24
2370	-31	-24
2385	-31	-24
2400	-31	-24
2415	-31	-24
2430	-31	-24
2445	-31	-24
2460	-32	-24
2475	-31	-24
2490	-31	-24
2505	-31	-24
2520	-31	-23
2535	-31	-23
2550	-32	-23
2565	-32	-23
2580	-32	-23
2595	-32	-22
2610	-31	-22
2625	-31	-22
2640	-31	-22
2655	-31	-21
2670	-32	-21
2685	-32	-21
2700	-33	-21
2715	-32	-20
2730	-32	-20
2745	-31	-20
2760	-32	-19
2775	-32	-19
2790	-32	-19
2805	-33	-19
2820	-33	-18

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
2835	-34	-18
2850	-34	-18
2865	-34	-18
2880	-33	-18
2895	-33	-17
2910	-34	-17
2925	-34	-17
2940	-36	-17
2955	-36	-17
2970	-38	-17
2985	-38	-16
3000	-38	-16



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# MITEQ AM-1607-3000 SERIES AMPLIFIER

Freq. (MHz)	Reverse Isolation (dB)
0.3	-63
15	-62
30	-61
45	-61
60	-61
75	-61
90	-61
105	-61
120	-61
135	-61
150	-61
165	-61
180	-61
195	-61
210	-61
225	-61
240	-61
255	-61
270	-61
285	-61
300	-61
315	-61
330	-62
345	-61
360	-61
375	-62
390	-62
405	-62
420	-62
435	-62
450	-62
465	-62
480	-62
495	-62
510	-62
525	-62
540	-62
555	-62
570	-63
585	-63
600	-63
615	-63
630	-63
645	-63
660	-63
675	-63
690	-63
705	-63
720	-63
735	-63
750	-63
765	-63
780	-63
795	-64
810	-64
825	-64
840	-64
855	-64
870	-64
885	-64
900	-64
915	-64
930	-64

Freq. (MHz)	Reverse Isolation (dB)
945	-64
960	-64
975	-64
990	-64
1005	-64
1020	-64
1035	-64
1050	-64
1065	-64
1080	-64
1095	-64
1110	-64
1125	-63
1140	-63
1155	-63
1170	-63
1185	-63
1200	-63
1215	-63
1230	-63
1245	-63
1260	-63
1275	-63
1290	-63
1305	-63
1320	-63
1335	-63
1350	-63
1365	-63
1380	-63
1395	-63
1410	-63
1425	-63
1440	-63
1455	-63
1470	-63
1485	-63
1500	-63
1515	-63
1530	-63
1545	-63
1560	-63
1575	-63
1590	-63
1605	-63
1620	-63
1635	-63
1650	-63
1665	-63
1680	-63
1695	-63
1710	-63
1725	-63
1740	-63
1755	-63
1770	-63
1785	-63
1800	-63
1815	-62
1830	-62
1845	-62
1860	-62
1875	-62

Freq. (MHz)	Reverse Isolation (dB)
1890	-62
1905	-62
1920	-62
1935	-62
1950	-62
1965	-62
1980	-62
1995	-62
2010	-62
2025	-62
2040	-62
2055	-62
2070	-62
2085	-62
2100	-62
2115	-62
2130	-62
2145	-62
2160	-62
2175	-62
2190	-62
2205	-62
2220	-62
2235	-62
2250	-62
2265	-62
2280	-62
2295	-62
2310	-62
2325	-62
2340	-62
2355	-62
2370	-62
2385	-62
2400	-62
2415	-62
2430	-62
2445	-62
2460	-61
2475	-61
2490	-61
2505	-61
2520	-61
2535	-61
2550	-61
2565	-61
2580	-61
2595	-61
2610	-61
2625	-61
2640	-61
2655	-61
2670	-61
2685	-61
2700	-61
2715	-61
2730	-61
2745	-61
2760	-61
2775	-61
2790	-61
2805	-61
2820	-61

Freq. (MHz)	Reverse Isolation (dB)
2835	-61
2850	-61
2865	-61
2880	-60
2895	-60
2910	-60
2925	-60
2940	-60
2955	-60
2970	-60
2985	-60
3000	-60



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# MITEQ AM-1607-3000 SERIES AMPLIFIER

Freq. (MHz)	Delay (Ns)
20	2.1
35	2.1
50	1.4
65	1.3
80	1.3
95	1.2
109	1.0
124	1.0
139	1.0
154	1.1
169	1.0
184	1.0
199	1.0
214	1.0
229	1.0
244	1.0
258	1.0
273	1.0
288	1.0
303	1.0
318	1.0
333	1.0
348	1.0
363	1.0
378	1.0
393	1.0
407	1.0
422	1.0
437	1.0
452	1.0
467	1.0
482	1.0
497	1.1
512	1.1
527	1.0
542	1.1
556	1.0
571	1.0
586	1.0
601	1.0
616	1.0
631	1.0
646	1.0
661	1.0
676	1.0
691	1.0
705	1.0
720	1.0
735	1.0
750	1.0
765	1.0
780	1.0
795	1.0
810	1.0
825	1.0
840	1.0
854	1.0
869	1.0
884	1.0
899	1.0
914	1.0
929	1.0
944	1.0

Freq. (MHz)	Delay (Ns)
959	1.0
974	1.0
989	1.0
1003	1.0
1018	1.0
1033	1.0
1048	1.0
1063	1.0
1078	1.0
1093	1.1
1108	1.1
1123	1.1
1138	1.1
1152	1.1
1167	1.0
1182	1.1
1197	1.1
1212	1.0
1227	1.1
1242	1.1
1257	1.1
1272	1.1
1287	1.1
1301	1.1
1316	1.1
1331	1.1
1346	1.1
1361	1.1
1376	1.1
1391	1.1
1406	1.1
1421	1.1
1436	1.1
1450	1.1
1465	1.1
1480	1.1
1495	1.1
1510	1.1
1525	1.1
1540	1.1
1555	1.1
1570	1.1
1585	1.1
1599	1.1
1614	1.1
1629	1.1
1644	1.1
1659	1.1
1674	1.1
1689	1.1
1704	1.1
1719	1.1
1734	1.1
1748	1.1
1763	1.1
1778	1.1
1793	1.1
1808	1.1
1823	1.1
1838	1.1
1853	1.1
1868	1.1
1883	1.1
1897	1.1

Freq. (MHz)	Delay (Ns)
1912	1.1
1927	1.1
1942	1.1
1957	1.1
1972	1.1
1987	1.1
2002	1.1
2017	1.1
2032	1.1
2046	1.1
2061	1.1
2076	1.1
2091	1.1
2106	1.1
2121	1.1
2136	1.1
2151	1.1
2166	1.1
2181	1.1
2195	1.1
2210	1.1
2225	1.1
2240	1.1
2255	1.1
2270	1.1
2285	1.1
2300	1.1
2315	1.1
2330	1.1
2344	1.1
2359	1.1
2374	1.1
2389	1.1
2404	1.1
2419	1.1
2434	1.1
2449	1.1
2464	1.1
2479	1.1
2493	1.1
2508	1.1
2523	1.1
2538	1.1
2553	1.1
2568	1.1
2583	1.1
2598	1.1
2613	1.2
2628	1.2
2642	1.2
2657	1.2
2672	1.2
2687	1.2
2702	1.2
2717	1.2
2732	1.2
2747	1.2
2762	1.2
2777	1.2
2791	1.2
2806	1.2
2821	1.2
2836	1.2
2851	1.2

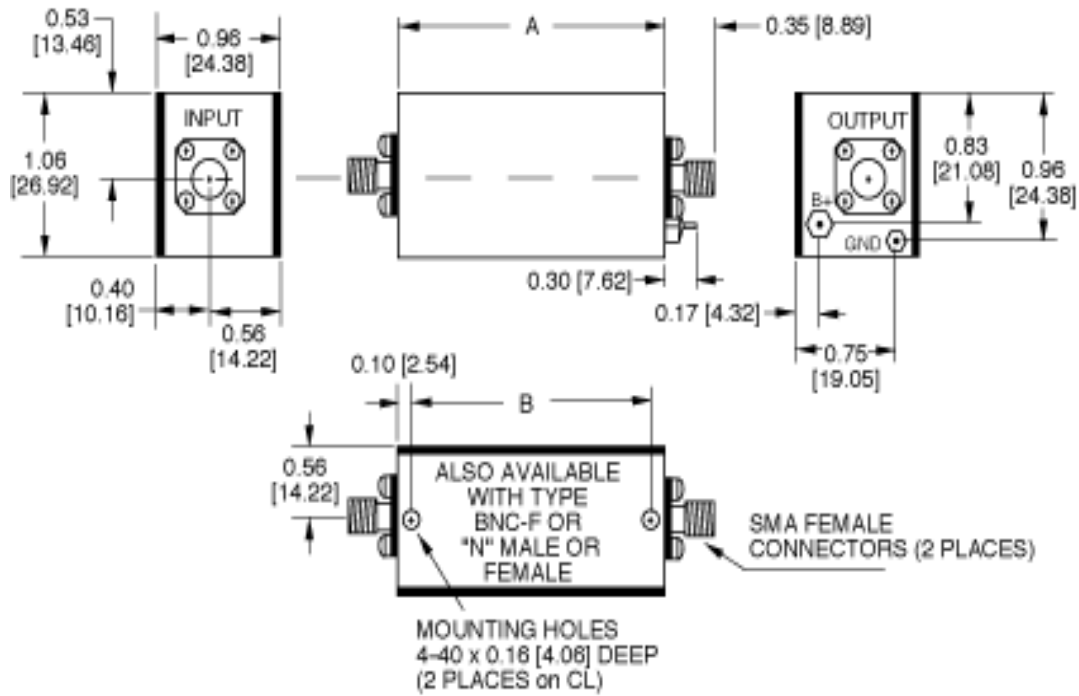
Freq. (MHz)	Delay (Ns)
2866	1.1
2881	1.1
2896	1.1
2911	1.1
2926	1.1
2940	1.1
2955	1.1
2970	1.1
2985	1.1
3000	1.1



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# MITEQ AM-1607-3000 SERIES AMPLIFIER

OUTLINE	DIM A	DIM B	OUNCES
2	1.92 [48.77]	1.72 [43.69]	2.2



NOTE: DIMENSIONS ARE IN INCHES [MILLIMETERS].



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## OPTIONS FOR BIPOLAR AMPLIFIERS

### INPUT BIAS TEE

#### Add Suffix “-F”

Used to inject bias signal to photo diode or other type of device. Check for availability on your model before ordering. Available on most units operating above 1 MHz. Please contact MITEQ with your custom requirements.

### BIAS THROUGH THE OUTPUT CONNECTOR

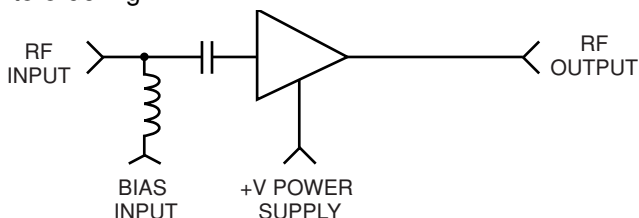
#### Add Suffix “-1306/E” or “-1306/D”

Used to supply operating power when the amplifier is remotely located while eliminating the need to run a separate DC line. Specify whether existing power pin should be “Enabled” or “Disabled.” To order, add -1306/E or -1306/D after model number. Example: AU-2A-0150-1306/E will have existing +15 V pin enabled so that it can be used as a test point. Use caution with this option since any voltage applied here will also be present on the RF output center pin. Available on most units operating above 1 MHz.

### BIAS THROUGH THE OUTPUT CONNECTOR WITH DC FEEDTHROUGH TO RF INPUT

#### Add Suffix “-1334/E” or “-1334/D”

Used to supply operating power when the amplifier is remotely located and eliminates the need to run a separate DC line. This DC voltage is then internally fed to the RF input to power a remote LNA or other low power equipment. Maximum current of external load will vary with model type. Available on most units operating above 1 MHz. Please contact factory prior to ordering.



Specify whether existing power pin should be “Enabled” or “Disabled”. To order, add “-1334/E” or “-1334/D”

after model number. Example: AU-2A-0150-1334/E will have existing +15 V pin enabled so that it can be used as a test point. Use caution with this option since any voltage applied here will also be present on both the RF output and input center pins.

### TYPE N OR BNC CONNECTORS

#### Add Suffix “-N” or “-BNC”

Type N-female and type BNC-female are available for all outlines 1 through 5, 12, 13 and 15 amplifiers. Add connector type after model number. Examples: AU-2A-0150-N; AU-2A-0150-BNC. Type N-male and mixed connector types are also available on request. Please call MITEQ with your specific requirements.

### INPUT INTERNAL LIMITER

#### Add Suffix “-1103”

Available on models up to 500 MHz. Will protect the input stage from CW signals as high as +30 dBm. To order, add “-1103” after model number. Example: AU-2A-0150-1103. Options are available for protection against short duration pulses up to 50 W.

### AC POWER SUPPLY (100 to 240 VAC, 47 - 440 Hz). Add Suffix “-1179”

Available as an add-on to most models using outlines 1 through 5 and 15. Includes 6-foot line cord with standard US line plug, internal fuse, on/off switch and LED indicator light. Amplifier is permanently mounted to power supply. To order, add “-1179” after model number. Example: AU-2A-0150-1179. Refer to outline 12 for dimensions.

### AC POWER SUPPLY (Wall plug-in unit) Part Number “205531-19”

A low cost alternate to option “-1179”, the wall plug-in unit is a small switching power supply capable of delivering 1 amp at 15 volts.

### AC POWER SUPPLY WITH SMC CONNECTORS (Wall plug-in unit) Part Number “-1179SC”

Same as above except has mating SMC connectors on amplifier DC input and power supply DC output. Available for outlines 1 through 10, 13 and 15.

### ADDITIONAL OPTIONS AVAILABLE

OPTION	SUFFIX
Gain Window	-GW
Phase Match	-PM
Amplitude Match	-AM
Gain Control	-GC

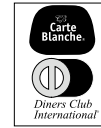


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## GENERAL INFORMATION

### PRICING AND TERMS

A quotation on any item in the catalog is available by contacting the factory. All quotations, unless otherwise noted, are valid for 60 days from the date of issue, F.O.B. (FCA) Hauppauge, NY 11788. Pricing does not include customer or government source inspection unless otherwise noted. On international orders, an irrevocable letter of credit may be required. MITEQ accepts these credit cards:



### QUANTITY DISCOUNTS

A quantity discount is generally available on most catalog items. Due to the wide variety of devices in the catalog, it is not possible to provide a standard discount schedule. When quantities are involved, please contact the factory and the appropriate information will be provided.

### SOURCE INSPECTION

Government / customer source inspection is available on any item upon receipt of the complete written confirmation of purchase order items, including the prime government contract number. Source inspection with respect to some products increases the unit price and extends delivery because of duplicate standard final inspection and testing. It is recommended wherever possible that a Certificate of Compliance be substituted for source inspection to minimize price and delivery delays.

### SHIPPING INFORMATION

Unless instructed otherwise by the customer, we will ship UPS in the U.S. F.O.B. (FCA) Hauppauge. Air freight will be used as the primary international means of shipment. Please indicate at time of purchase what method of shipment you require.

### RETURNED MATERIAL

When returning material for repair or replacement, please ensure that there is complete information included with the shipment, giving a detailed description of the reason for its return, the date and purchase order on which it was obtained, and the exact address to which the material is to be reshipped. All returns must arrive freight, postage, duties and handling prepaid.

### REPAIR COSTS

Warranty repairs will be made at no cost to the customer. Units out of warranty, or those which have been mishandled, will require approval by the customer for the charges involved before the repairs can be accomplished. We will provide an estimate for the cost of the repair, which can be applied to the repair, if approval is granted. For those items that are deemed beyond repair, or where the customer may decide not to repair the unit, an evaluation fee and handling charge will be applicable.

### APPLICATION ENGINEERING

We maintain a large support staff of engineers who are experts in specific areas of microwave technology. Each has an engineering background that combines both a formal engineering education with training and experience in product design. As further technical support, we make available the services of our engineering and scientific staff, who may be consulted on more advanced circuit designs or application problems.

### DRAWINGS AND SPECIFICATIONS

The material presented in this catalog was current at the time of publication. MITEQ Inc.'s continuing product improvement program makes it necessary to reserve the right to change our mechanical and electrical specifications without notice. If either of these parameters is critical, please contact the factory to verify that the information is current.

## ADDITIONAL INFORMATION

### WARRANTY

### ISO 9001:2000 Certified



### MITEQ FEDERAL SUPPLY CODE

Our Federal Supply Code is: 33592



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