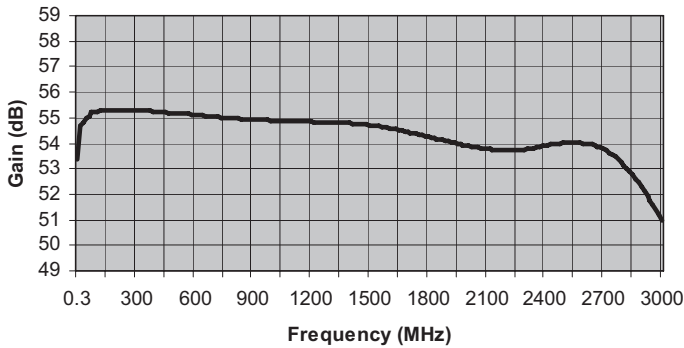


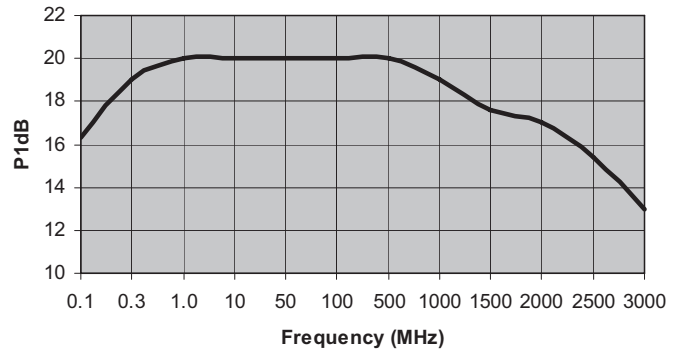
MITEQ AM-1594 SERIES AMPLIFIER

FREQUENCY (MHz)	MODEL NUMBER	GAIN (dB) (Min.)	VAR. (\pm dB) (Max.)	VSWR (Max.)	IMPED. IN/OUT (Ohms)	NOISE FIGURE (dB, Typ.)	P1 dB (dBm) (Typ.)	VOLTS	NOM. DC POWER (mA)	OUTLINE NO.
0.3-3000	AM-1594	51	3.5	2.0:1	50/50	3.3	18	15	195	3

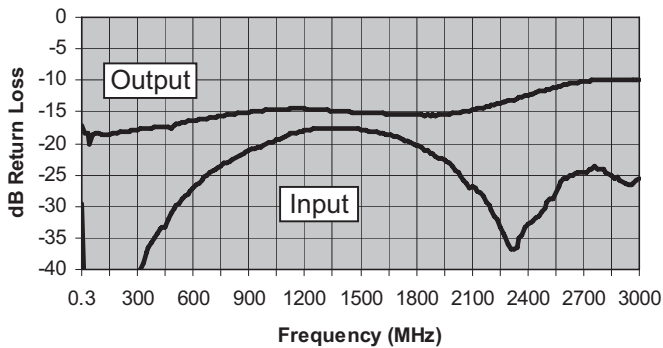
Gain (dB)



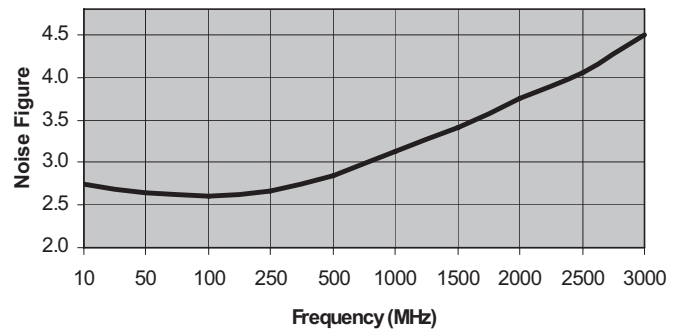
Output -1dB Gain Compression (+dBm)



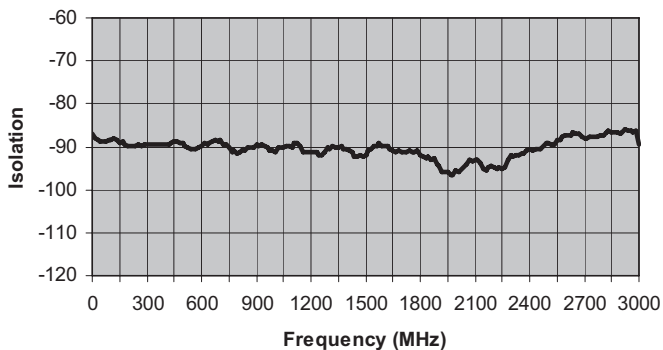
Input & Output Return Loss (dBRL)



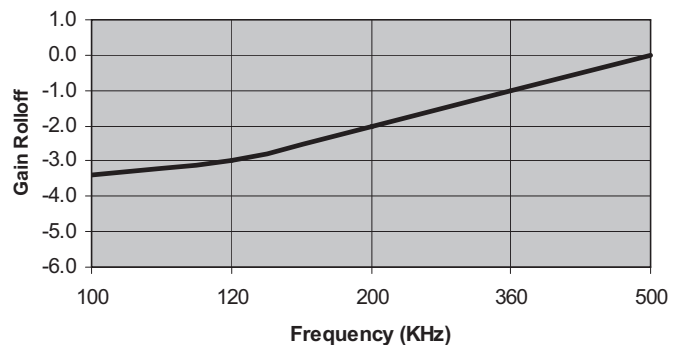
Noise Figure (dB)



Reverse Isolation (dB)



Low Frequency Gain Rolloff (dB)



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MITEQ AM-1594 SERIES AMPLIFIER

Freq. (MHz)	Gain (dB)
0.3	53.4
15	54.7
30	54.8
45	55.0
60	55.0
75	55.3
90	55.3
105	55.3
120	55.3
135	55.3
150	55.3
165	55.3
180	55.3
195	55.3
210	55.3
225	55.3
240	55.3
255	55.3
270	55.3
285	55.3
300	55.3
315	55.3
330	55.3
345	55.3
360	55.3
375	55.3
390	55.3
405	55.2
420	55.2
435	55.2
450	55.2
465	55.2
480	55.2
495	55.2
510	55.2
525	55.2
540	55.1
555	55.1
570	55.1
585	55.1
600	55.1
615	55.1
630	55.1
645	55.1
660	55.1
675	55.1
690	55.0
705	55.0
720	55.0
735	55.0
750	55.0
765	55.0
780	55.0
795	55.0
810	55.0
825	55.0
840	55.0
855	54.9
870	54.9
885	54.9
900	54.9
915	54.9
930	54.9
945	54.9

Freq. (MHz)	Gain (dB)
960	54.9
975	54.9
990	54.9
1005	54.9
1020	54.9
1035	54.9
1050	54.9
1065	54.9
1080	54.9
1095	54.9
1110	54.9
1125	54.9
1140	54.9
1155	54.9
1170	54.9
1185	54.8
1200	54.8
1215	54.8
1230	54.8
1245	54.8
1260	54.8
1275	54.8
1290	54.8
1305	54.8
1320	54.8
1335	54.8
1350	54.8
1365	54.8
1380	54.8
1395	54.8
1410	54.8
1425	54.8
1440	54.8
1455	54.7
1470	54.7
1485	54.7
1500	54.7
1515	54.7
1530	54.7
1545	54.7
1560	54.6
1575	54.6
1590	54.6
1605	54.6
1620	54.6
1635	54.5
1650	54.5
1665	54.5
1680	54.5
1695	54.4
1710	54.4
1725	54.4
1740	54.4
1755	54.3
1770	54.3
1785	54.3
1800	54.3
1815	54.2
1830	54.2
1845	54.2
1860	54.2
1875	54.1
1890	54.1
1905	54.1

Freq. (MHz)	Gain (dB)
1920	54.0
1935	54.0
1950	54.0
1965	54.0
1980	53.9
1995	53.9
2010	53.9
2025	53.9
2040	53.8
2055	53.8
2070	53.8
2085	53.8
2100	53.8
2115	53.8
2130	53.8
2145	53.7
2160	53.7
2175	53.7
2190	53.7
2205	53.7
2220	53.7
2235	53.7
2250	53.7
2265	53.7
2280	53.7
2295	53.8
2310	53.8
2325	53.8
2340	53.8
2355	53.8
2370	53.9
2385	53.9
2400	53.9
2415	53.9
2430	54.0
2445	54.0
2460	54.0
2475	54.0
2490	54.0
2505	54.0
2520	54.0
2535	54.0
2550	54.0
2565	54.0
2580	54.0
2595	54.0
2610	54.0
2625	54.0
2640	53.9
2655	53.9
2670	53.9
2685	53.8
2700	53.8
2715	53.7
2730	53.6
2745	53.6
2760	53.5
2775	53.4
2790	53.3
2805	53.2
2820	53.0
2835	52.9
2850	52.8
2865	52.6

Freq. (MHz)	Gain (dB)
2880	52.4
2895	52.3
2910	52.1
2925	51.9
2940	51.8
2955	51.6
2970	51.4
2985	51.2
3000	51.0



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Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
0.3	-30	-17
15	-45	-18
30	-42	-18
45	-45	-20
60	-44	-19
75	-48	-19
90	-46	-19
105	-46	-19
120	-44	-19
135	-44	-19
150	-49	-19
165	-50	-18
180	-50	-18
195	-51	-18
210	-50	-18
225	-48	-18
240	-47	-18
255	-45	-18
270	-44	-18
285	-42	-18
300	-41	-18
315	-40	-18
330	-39	-18
345	-37	-18
360	-37	-18
375	-36	-18
390	-35	-17
405	-34	-17
420	-34	-17
435	-33	-17
450	-33	-17
465	-32	-17
480	-31	-18
495	-30	-17
510	-30	-17
525	-29	-17
540	-29	-17
555	-28	-17
570	-28	-17
585	-28	-16
600	-27	-16
615	-27	-16
630	-26	-16
645	-26	-16
660	-25	-16
675	-25	-16
690	-25	-16
705	-24	-16
720	-24	-16
735	-24	-16
750	-24	-16
765	-23	-16
780	-23	-16
795	-23	-15
810	-23	-15
825	-22	-15
840	-22	-15
855	-22	-15
870	-22	-15
885	-21	-15
900	-21	-15
915	-21	-15
930	-21	-15

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
945	-21	-15
960	-21	-15
975	-20	-15
990	-20	-15
1005	-20	-15
1020	-20	-15
1035	-20	-15
1050	-19	-15
1065	-19	-15
1080	-19	-15
1095	-19	-15
1110	-19	-15
1125	-18	-15
1140	-18	-15
1155	-18	-15
1170	-18	-15
1185	-18	-15
1200	-18	-15
1215	-18	-15
1230	-18	-15
1245	-18	-15
1260	-18	-15
1275	-18	-15
1290	-18	-15
1305	-18	-15
1320	-18	-15
1335	-18	-15
1350	-18	-15
1365	-18	-15
1380	-18	-15
1395	-18	-15
1410	-18	-15
1425	-18	-15
1440	-18	-15
1455	-18	-15
1470	-18	-15
1485	-18	-15
1500	-18	-15
1515	-18	-15
1530	-18	-15
1545	-18	-15
1560	-18	-15
1575	-18	-15
1590	-18	-15
1605	-18	-15
1620	-18	-15
1635	-19	-15
1650	-19	-15
1665	-19	-15
1680	-19	-15
1695	-19	-15
1710	-19	-15
1725	-19	-15
1740	-20	-15
1755	-20	-15
1770	-20	-15
1785	-20	-15
1800	-20	-15
1815	-20	-16
1830	-21	-16
1845	-21	-16
1860	-21	-16
1875	-22	-16

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
1890	-22	-16
1905	-22	-16
1920	-22	-16
1935	-22	-15
1950	-23	-15
1965	-23	-15
1980	-23	-15
1995	-24	-15
2010	-24	-15
2025	-25	-15
2040	-25	-15
2055	-26	-15
2070	-26	-15
2085	-27	-15
2100	-27	-15
2115	-27	-15
2130	-28	-15
2145	-28	-14
2160	-28	-14
2175	-29	-14
2190	-30	-14
2205	-31	-14
2220	-32	-14
2235	-32	-14
2250	-33	-14
2265	-34	-14
2280	-35	-13
2295	-36	-13
2310	-37	-13
2325	-37	-13
2340	-36	-13
2355	-35	-13
2370	-35	-13
2385	-33	-13
2400	-33	-12
2415	-33	-12
2430	-32	-12
2445	-32	-12
2460	-32	-12
2475	-31	-12
2490	-30	-12
2505	-29	-11
2520	-29	-11
2535	-29	-11
2550	-28	-11
2565	-27	-11
2580	-26	-11
2595	-26	-11
2610	-25	-11
2625	-25	-11
2640	-25	-10
2655	-25	-10
2670	-25	-10
2685	-25	-10
2700	-25	-10
2715	-25	-10
2730	-24	-10
2745	-24	-10
2760	-24	-10
2775	-24	-10
2790	-24	-10
2805	-24	-10
2820	-25	-10

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
2835	-25	-10
2850	-25	-10
2865	-26	-10
2880	-25	-10
2895	-26	-10
2910	-26	-10
2925	-26	-10
2940	-27	-10
2955	-27	-10
2970	-26	-10
2985	-26	-10
3000	-25	-10



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Freq	Isol
0.3	-87
15	-88
30	-88
45	-89
60	-89
75	-89
90	-88
105	-88
120	-88
135	-88
150	-89
165	-89
180	-89
195	-90
210	-90
225	-90
240	-90
255	-90
270	-90
285	-90
300	-90
315	-89
330	-89
345	-89
360	-90
375	-89
390	-90
405	-89
420	-90
435	-89
450	-89
465	-89
480	-89
495	-89
510	-90
525	-90
540	-90
555	-90
570	-90
585	-90
600	-90
615	-89
630	-89
645	-89
660	-89
675	-88
690	-89
705	-89
720	-90
735	-90
750	-90
765	-91
780	-91
795	-92
810	-91
825	-91
840	-91
855	-90
870	-90
885	-90
900	-89
915	-90
930	-89
945	-90
960	-90

975	-91
990	-91
1005	-91
1020	-90
1035	-90
1050	-90
1065	-90
1080	-90
1095	-90
1110	-89
1125	-89
1140	-90
1155	-91
1170	-91
1185	-91
1200	-91
1215	-91
1230	-91
1245	-92
1260	-92
1275	-91
1290	-90
1305	-90
1320	-90
1335	-90
1350	-90
1365	-90
1380	-90
1395	-91
1410	-91
1425	-91
1440	-92
1455	-92
1470	-92
1485	-92
1500	-92
1515	-91
1530	-91
1545	-90
1560	-90
1575	-89
1590	-90
1605	-90
1620	-90
1635	-90
1650	-91
1665	-91
1680	-91
1695	-91
1710	-91
1725	-91
1740	-91
1755	-91
1770	-91
1785	-91
1800	-92
1815	-92
1830	-93
1845	-92
1860	-93
1875	-93
1890	-94
1905	-95
1920	-96
1935	-96
1950	-96

1965	-96
1980	-97
1995	-95
2010	-96
2025	-95
2040	-95
2055	-94
2070	-93
2085	-93
2100	-93
2115	-93
2130	-94
2145	-95
2160	-95
2175	-95
2190	-94
2205	-95
2220	-95
2235	-95
2250	-95
2265	-95
2280	-93
2295	-92
2310	-92
2325	-92
2340	-92
2355	-92
2370	-91
2385	-91
2400	-91
2415	-91
2430	-90
2445	-90
2460	-90
2475	-90
2490	-89
2505	-89
2520	-89
2535	-89
2550	-88
2565	-88
2580	-88
2595	-87
2610	-87
2625	-87
2640	-87
2655	-87
2670	-87
2685	-88
2700	-88
2715	-88
2730	-88
2745	-88
2760	-88
2775	-88
2790	-87
2805	-87
2820	-87
2835	-86
2850	-86
2865	-87
2880	-87
2895	-87
2910	-87
2925	-86
2940	-86

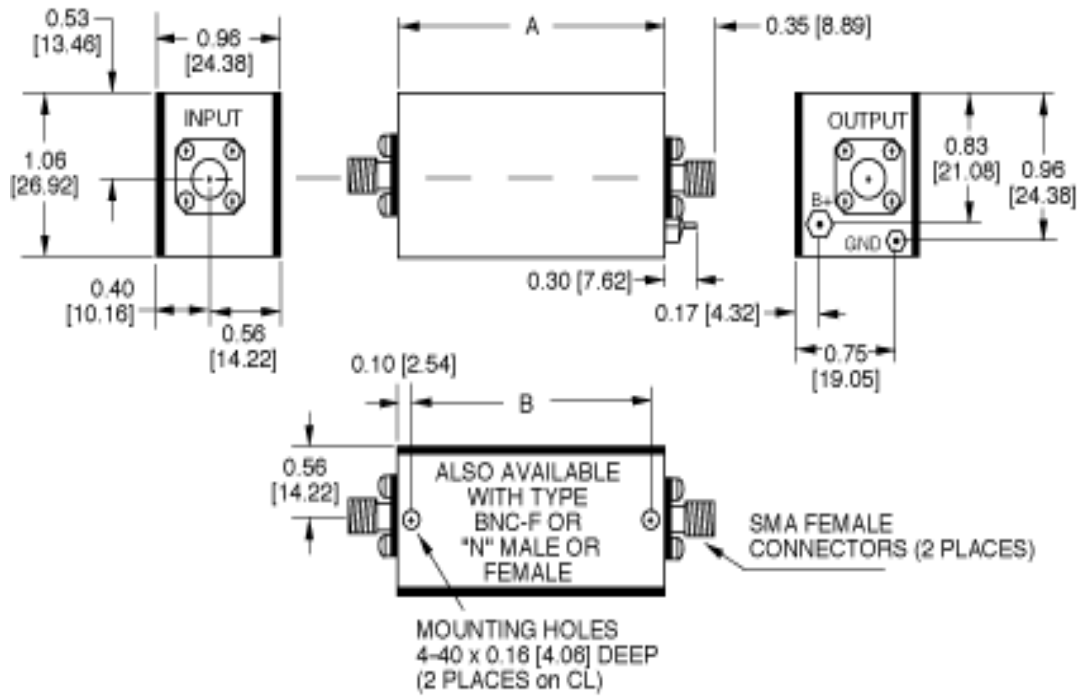
2955	-86
2970	-87
2985	-86
3000	-90



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MITEQ AM-1594 SERIES AMPLIFIER

OUTLINE	DIM A	DIM B	OUNCES
3	2.74 [69.60]	2.54 [64.52]	2.9



NOTE: DIMENSIONS ARE IN INCHES [MILLIMETERS].

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

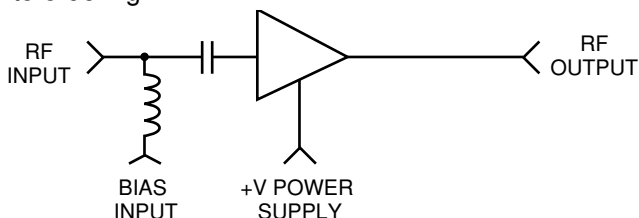
Add Suffix “-1306/E” or “-1306/D”

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

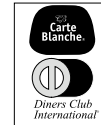


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GENERAL INFORMATION

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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