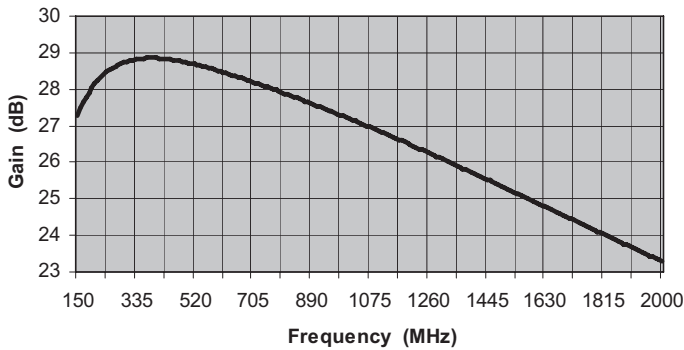


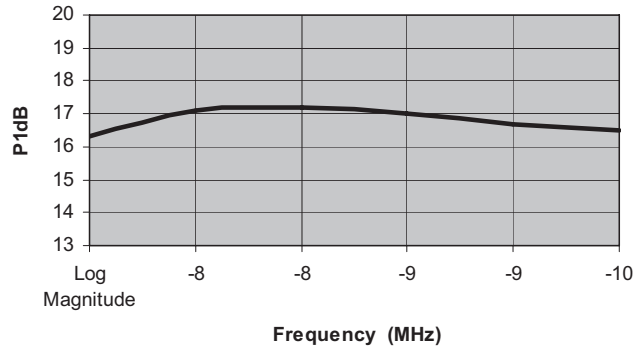
MITEQ AM-1645 AMPLIFIER

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.
200-2000	AM-1645	26	4	2.0:1	50/50	2	15	15	150	2

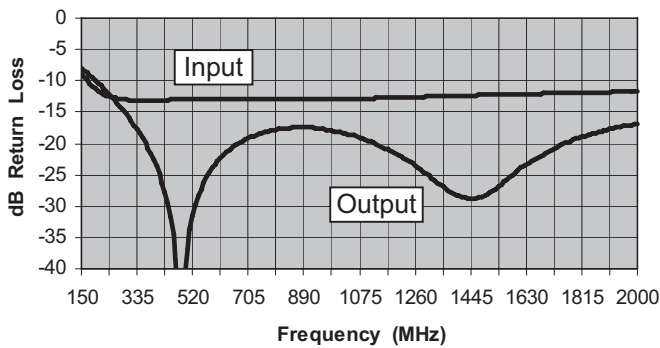
Gain (dB)



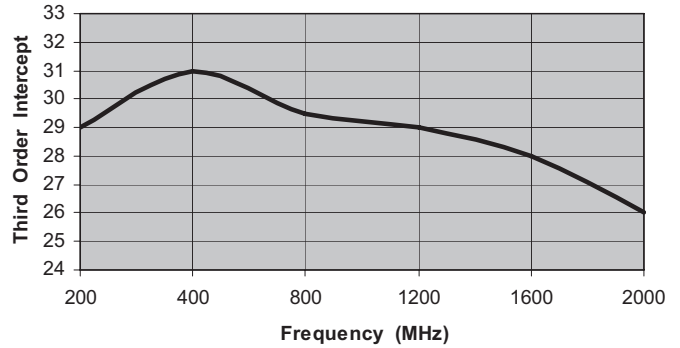
Output -1dB Gain Compression (+dBm)



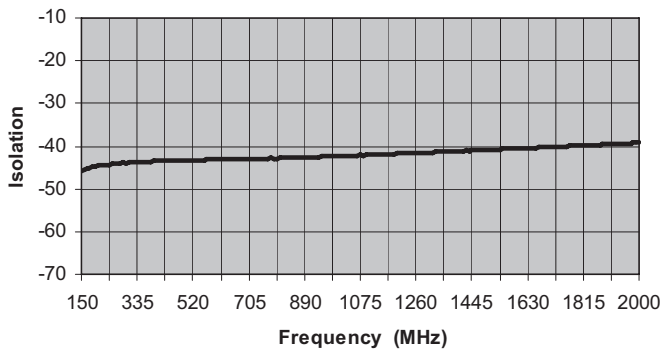
Input & Output Return Loss (dBRL)



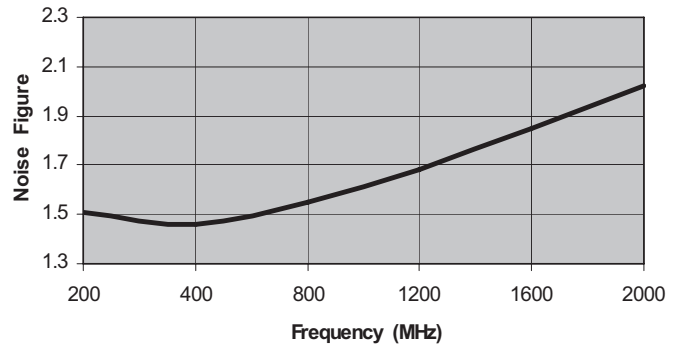
Output Third Order Intercept Point (+dBm)



Reverse Isolation (dB)



Noise Figure (dB)



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Freq. (MHz)	Gain (dB)
150	27.3
159	27.5
169	27.6
178	27.8
187	27.9
196	28.0
206	28.1
215	28.2
224	28.3
233	28.4
243	28.5
252	28.5
261	28.6
270	28.6
280	28.7
289	28.7
298	28.7
307	28.8
317	28.8
326	28.8
335	28.8
344	28.8
354	28.8
363	28.8
372	28.9
381	28.9
391	28.9
400	28.9
409	28.8
418	28.8
428	28.8
437	28.8
446	28.8
455	28.8
465	28.8
474	28.8
483	28.8
492	28.7
502	28.7
511	28.7
520	28.7
529	28.7
539	28.6
548	28.6
557	28.6
566	28.6
576	28.6
585	28.5
594	28.5
603	28.5
613	28.5
622	28.4
631	28.4
640	28.4
650	28.4
659	28.3
668	28.3

Freq. (MHz)	Gain (dB)
677	28.3
687	28.3
696	28.2
705	28.2
714	28.2
724	28.1
733	28.1
742	28.1
751	28.1
761	28.0
770	28.0
779	28.0
788	27.9
798	27.9
807	27.9
816	27.9
825	27.8
835	27.8
844	27.8
853	27.7
862	27.7
872	27.7
881	27.6
890	27.6
899	27.6
909	27.5
918	27.5
927	27.5
936	27.5
946	27.4
955	27.4
964	27.4
973	27.3
983	27.3
992	27.3
1001	27.2
1010	27.2
1020	27.2
1029	27.1
1038	27.1
1047	27.1
1057	27.0
1066	27.0
1075	27.0
1084	26.9
1094	26.9
1103	26.9
1112	26.8
1121	26.8
1131	26.8
1140	26.7
1149	26.7
1158	26.7
1168	26.6
1177	26.6
1186	26.6
1195	26.5

Freq. (MHz)	Gain (dB)
1205	26.5
1214	26.4
1223	26.4
1232	26.4
1242	26.3
1251	26.3
1260	26.3
1269	26.2
1279	26.2
1288	26.2
1297	26.1
1306	26.1
1316	26.0
1325	26.0
1334	26.0
1343	25.9
1353	25.9
1362	25.9
1371	25.8
1380	25.8
1390	25.8
1399	25.7
1408	25.7
1417	25.6
1427	25.6
1436	25.6
1445	25.5
1454	25.5
1464	25.5
1473	25.4
1482	25.4
1491	25.3
1501	25.3
1510	25.3
1519	25.2
1528	25.2
1538	25.2
1547	25.1
1556	25.1
1565	25.0
1575	25.0
1584	25.0
1593	24.9
1602	24.9
1612	24.9
1621	24.8
1630	24.8
1639	24.7
1649	24.7
1658	24.7
1667	24.6
1676	24.6
1686	24.6
1695	24.5
1704	24.5
1713	24.4
1723	24.4

Freq. (MHz)	Gain (dB)
1732	24.4
1741	24.3
1750	24.3
1760	24.3
1769	24.2
1778	24.2
1787	24.1
1797	24.1
1806	24.1
1815	24.0
1824	24.0
1834	24.0
1843	23.9
1852	23.9
1861	23.8
1871	23.8
1880	23.8
1889	23.7
1898	23.7
1908	23.7
1917	23.6
1926	23.6
1935	23.6
1945	23.5
1954	23.5
1963	23.4
1972	23.4
1982	23.4
1991	23.3
2000	23.3



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MITEQ AM-1645 AMPLIFIER

Freq. (MHz)	Input VSWR (dBRL)	Output VBSR (dBRL)
150	-9	-8
159	-9	-8
169	-10	-9
178	-10	-9
187	-11	-10
196	-11	-10
206	-12	-10
215	-12	-11
224	-12	-11
233	-12	-12
243	-13	-12
252	-13	-13
261	-13	-13
270	-13	-14
280	-13	-14
289	-13	-15
298	-13	-15
307	-13	-16
317	-13	-16
326	-13	-17
335	-13	-18
344	-13	-18
354	-13	-19
363	-13	-20
372	-13	-21
381	-13	-22
391	-13	-23
400	-13	-24
409	-13	-25
418	-13	-26
428	-13	-28
437	-13	-30
446	-13	-32
455	-13	-35
465	-13	-39
474	-13	-46
483	-13	-52
492	-13	-41
502	-13	-37
511	-13	-34
520	-13	-32
529	-13	-30
539	-13	-28
548	-13	-27
557	-13	-26
566	-13	-25
576	-13	-25
585	-13	-24
594	-13	-23
603	-13	-23
613	-13	-22
622	-13	-22
631	-13	-21
640	-13	-21
650	-13	-21
659	-13	-20

Freq. (MHz)	Input VSWR (dBRL)	Output VBSR (dBRL)
668	-13	-20
677	-13	-20
687	-13	-20
696	-13	-19
705	-13	-19
714	-13	-19
724	-13	-19
733	-13	-19
742	-13	-18
751	-13	-18
761	-13	-18
770	-13	-18
779	-13	-18
788	-13	-18
798	-13	-18
807	-13	-18
816	-13	-18
825	-13	-18
835	-13	-18
844	-13	-18
853	-13	-18
862	-13	-17
872	-13	-17
881	-13	-17
890	-13	-17
899	-13	-17
909	-13	-17
918	-13	-18
927	-13	-18
936	-13	-18
946	-13	-18
955	-13	-18
964	-13	-18
973	-13	-18
983	-13	-18
992	-13	-18
1001	-13	-18
1010	-13	-18
1020	-13	-18
1029	-13	-18
1038	-13	-19
1047	-13	-19
1057	-13	-19
1066	-13	-19
1075	-13	-19
1084	-13	-19
1094	-13	-19
1103	-13	-20
1112	-13	-20
1121	-13	-20
1131	-13	-20
1140	-13	-20
1149	-13	-21
1158	-13	-21
1168	-13	-21
1177	-13	-21

Freq. (MHz)	Input VSWR (dBRL)	Output VBSR (dBRL)
1186	-13	-21
1195	-13	-22
1205	-13	-22
1214	-13	-22
1223	-13	-22
1232	-13	-23
1242	-13	-23
1251	-13	-23
1260	-13	-23
1269	-13	-24
1279	-13	-24
1288	-13	-24
1297	-13	-25
1306	-13	-25
1316	-13	-26
1325	-12	-26
1334	-12	-26
1343	-12	-27
1353	-12	-27
1362	-12	-27
1371	-12	-27
1380	-12	-28
1390	-12	-28
1399	-12	-28
1408	-12	-28
1417	-12	-29
1427	-12	-29
1436	-12	-29
1445	-12	-29
1454	-12	-29
1464	-12	-29
1473	-12	-29
1482	-12	-29
1491	-12	-28
1501	-12	-28
1510	-12	-28
1519	-12	-28
1528	-12	-27
1538	-12	-27
1547	-12	-27
1556	-12	-26
1565	-12	-26
1575	-12	-25
1584	-12	-25
1593	-12	-25
1602	-12	-24
1612	-12	-24
1621	-12	-24
1630	-12	-23
1639	-12	-23
1649	-12	-23
1658	-12	-23
1667	-12	-22
1676	-12	-22
1686	-12	-22
1695	-12	-22

Freq. (MHz)	Input VSWR (dBRL)	Output VBSR (dBRL)
1704	-12	-21
1713	-12	-21
1723	-12	-21
1732	-12	-21
1741	-12	-20
1750	-12	-20
1760	-12	-20
1769	-12	-20
1778	-12	-20
1787	-12	-19
1797	-12	-19
1806	-12	-19
1815	-12	-19
1824	-12	-19
1834	-12	-19
1843	-12	-19
1852	-12	-18
1861	-12	-18
1871	-12	-18
1880	-12	-18
1889	-12	-18
1898	-12	-18
1908	-12	-18
1917	-12	-18
1926	-12	-17
1935	-12	-17
1945	-12	-17
1954	-12	-17
1963	-12	-17
1972	-12	-17
1982	-12	-17
1991	-12	-17
2000	-12	-17



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Freq. (MHz)	Reverse Isolation (dB)
150	-46
159	-46
169	-45
178	-45
187	-45
196	-45
206	-45
215	-45
224	-44
233	-44
243	-44
252	-44
261	-44
270	-44
280	-44
289	-44
298	-44
307	-44
317	-44
326	-44
335	-44
344	-44
354	-44
363	-44
372	-44
381	-44
391	-44
400	-43
409	-43
418	-43
428	-43
437	-43
446	-43
455	-43
465	-43
474	-43
483	-43
492	-43
502	-43
511	-43
520	-43
529	-43
539	-43
548	-43
557	-43
566	-43
576	-43
585	-43
594	-43
603	-43
613	-43
622	-43
631	-43
640	-43
650	-43
659	-43

Freq. (MHz)	Reverse Isolation (dB)
668	-43
677	-43
687	-43
696	-43
705	-43
714	-43
724	-43
733	-43
742	-43
751	-43
761	-43
770	-43
779	-43
788	-43
798	-43
807	-43
816	-43
825	-43
835	-43
844	-43
853	-43
862	-43
872	-43
881	-43
890	-43
899	-43
909	-43
918	-43
927	-43
936	-43
946	-42
955	-42
964	-42
973	-42
983	-42
992	-42
1001	-42
1010	-42
1020	-42
1029	-42
1038	-42
1047	-42
1057	-42
1066	-42
1075	-42
1084	-42
1094	-42
1103	-42
1112	-42
1121	-42
1131	-42
1140	-42
1149	-42
1158	-42
1168	-42
1177	-42

Freq. (MHz)	Reverse Isolation (dB)
1186	-42
1195	-42
1205	-42
1214	-42
1223	-42
1232	-42
1242	-42
1251	-42
1260	-42
1269	-42
1279	-42
1288	-42
1297	-41
1306	-41
1316	-41
1325	-41
1334	-41
1343	-41
1353	-41
1362	-41
1371	-41
1380	-41
1390	-41
1399	-41
1408	-41
1417	-41
1427	-41
1436	-41
1445	-41
1454	-41
1464	-41
1473	-41
1482	-41
1491	-41
1501	-41
1510	-41
1519	-41
1528	-41
1538	-41
1547	-41
1556	-41
1565	-41
1575	-41
1584	-41
1593	-41
1602	-41
1612	-40
1621	-40
1630	-40
1639	-40
1649	-40
1658	-40
1667	-40
1676	-40
1686	-40
1695	-40

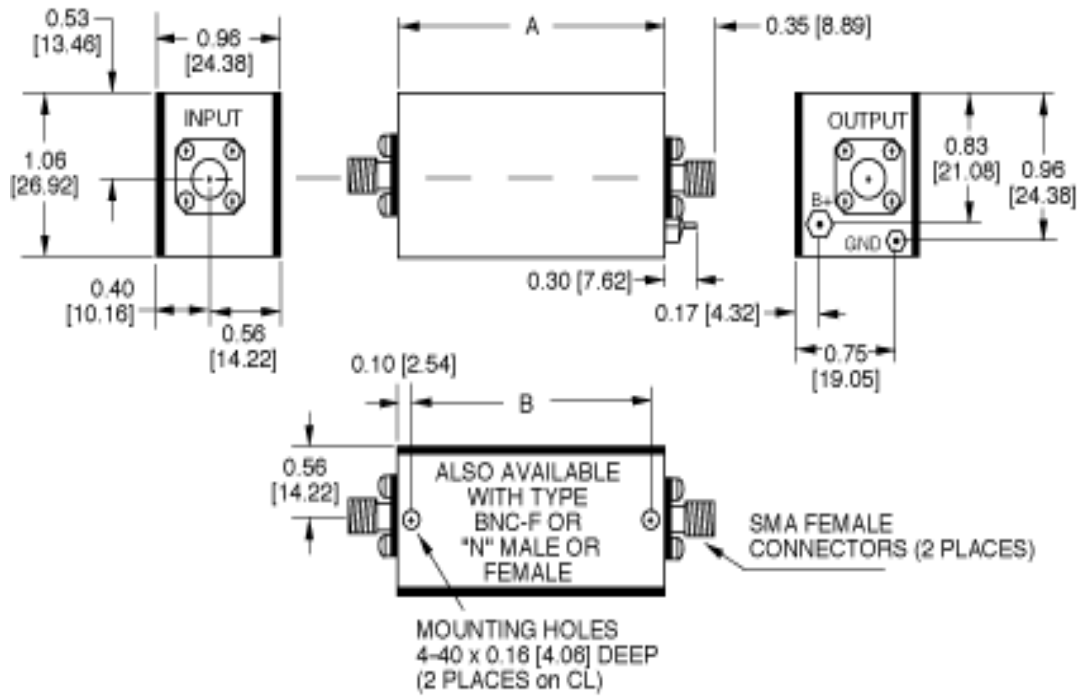
Freq. (MHz)	Reverse Isolation (dB)
1704	-40
1713	-40
1723	-40
1732	-40
1741	-40
1750	-40
1760	-40
1769	-40
1778	-40
1787	-40
1797	-40
1806	-40
1815	-40
1824	-40
1834	-40
1843	-40
1852	-40
1861	-40
1871	-40
1880	-40
1889	-40
1898	-40
1908	-39
1917	-40
1926	-40
1935	-39
1945	-39
1954	-39
1963	-39
1972	-39
1982	-39
1991	-39
2000	-39



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MITEQ AM-1645 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

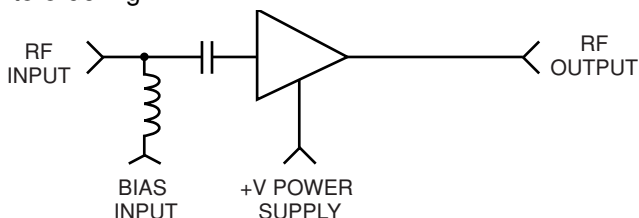
Add Suffix “-1306/E” or “-1306/D”

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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