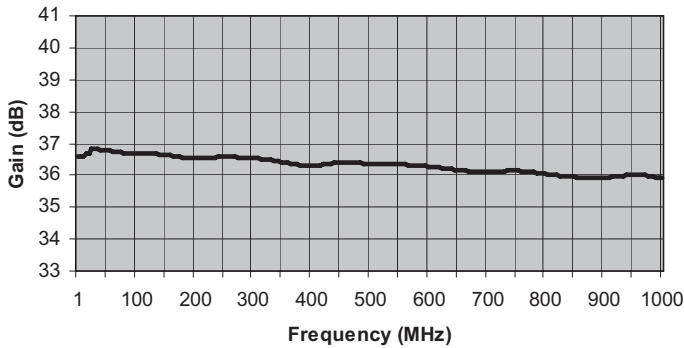


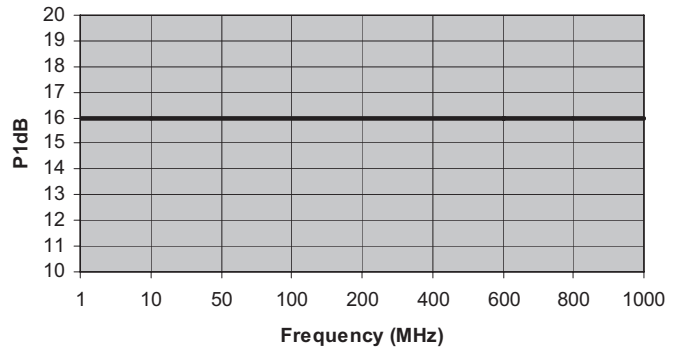
MITEQ AM-1331 & AM-1412 SERIES AMPLIFIER

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.
1-1000	AM-1331	35	0.75	2.0:1	50/50	1.6	15	15	140	8
1-1000	AM-1412	35	0.75	2.0:1	50/50	1.6	15	15	140	3

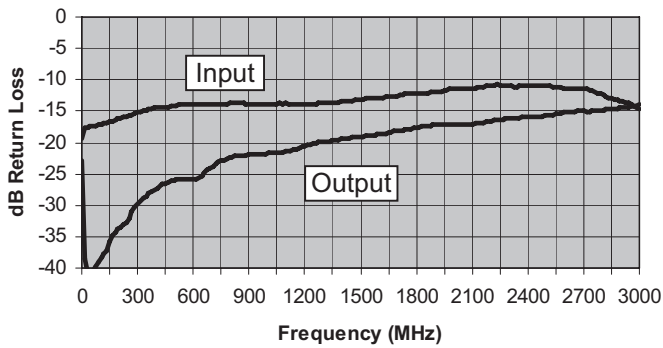
Gain (dB)



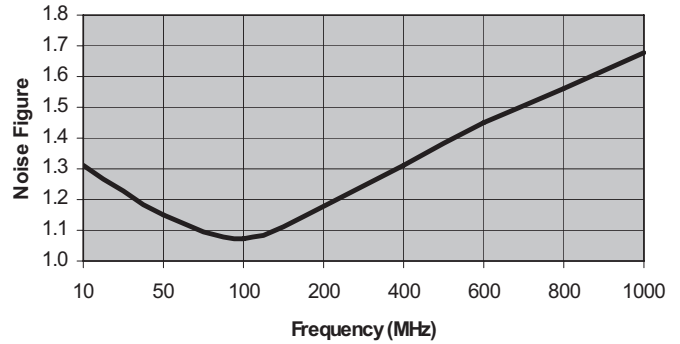
Output -1dB Gain Compression (+dBm)



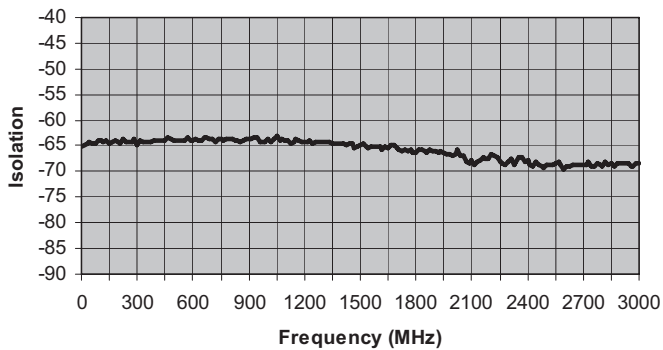
Input & Output Return Loss (dBRL)



Noise Figure (dB)



Reverse Isolation (dB)



ISO 9001:2000 Certified • General Information • Warranty



100 Davids Drive, Hauppauge, NY 11788
 TEL.: (631) 439-9220 • FAX: (631) 436-7430
 e-mail: components@miteq.com • www.miteq.com

MITEQ AM-1331 & AM-1412 SERIES AMPLIFIER

Freq. (MHz)	Gain (dB)
0.3	36.6
5	36.6
10	36.6
15	36.7
20	36.7
25	36.8
30	36.8
35	36.8
40	36.8
45	36.8
50	36.8
55	36.8
60	36.8
65	36.7
70	36.7
75	36.7
80	36.7
85	36.7
90	36.7
95	36.7
100	36.7
105	36.7
110	36.7
115	36.7
120	36.7
125	36.7
130	36.7
135	36.7
140	36.7
145	36.7
150	36.6
155	36.6
160	36.6
165	36.6
170	36.6
175	36.6
180	36.6
185	36.6
190	36.5
195	36.5
200	36.5
205	36.5
210	36.5
215	36.5
220	36.5
225	36.6
230	36.6
235	36.6
240	36.6
245	36.6
250	36.6
255	36.6
260	36.6
265	36.6
270	36.6
275	36.6
280	36.6

Freq. (MHz)	Gain (dB)
285	36.6
290	36.6
295	36.5
300	36.5
305	36.5
310	36.5
315	36.5
320	36.5
325	36.5
330	36.5
335	36.5
340	36.4
345	36.4
350	36.4
355	36.4
360	36.4
365	36.4
370	36.3
375	36.3
380	36.3
385	36.3
390	36.3
395	36.3
400	36.3
405	36.3
410	36.3
415	36.3
420	36.3
425	36.3
430	36.4
435	36.4
440	36.4
445	36.4
450	36.4
455	36.4
460	36.4
465	36.4
470	36.4
475	36.4
480	36.4
485	36.4
490	36.4
495	36.4
500	36.4
505	36.4
510	36.4
515	36.3
520	36.3
525	36.3
530	36.3
535	36.3
540	36.3
545	36.3
550	36.3
555	36.3
560	36.3
565	36.3

Freq. (MHz)	Gain (dB)
570	36.3
575	36.3
580	36.3
585	36.3
590	36.3
595	36.3
600	36.3
605	36.3
610	36.3
615	36.2
620	36.2
625	36.2
630	36.2
635	36.2
640	36.2
645	36.2
650	36.2
655	36.2
660	36.1
665	36.1
670	36.1
675	36.1
680	36.1
685	36.1
690	36.1
695	36.1
700	36.1
705	36.1
710	36.1
715	36.1
720	36.1
725	36.1
730	36.1
735	36.1
740	36.1
745	36.1
750	36.1
755	36.1
760	36.1
765	36.1
770	36.1
775	36.1
780	36.1
785	36.1
790	36.1
795	36.1
800	36.0
805	36.0
810	36.0
815	36.0
820	36.0
825	36.0
830	36.0
835	36.0
840	36.0
845	36.0
850	35.9

Freq. (MHz)	Gain (dB)
855	35.9
860	35.9
865	35.9
870	35.9
875	35.9
880	35.9
885	35.9
890	35.9
895	35.9
900	35.9
905	35.9
910	35.9
915	36.0
920	36.0
925	36.0
930	36.0
935	36.0
940	36.0
945	36.0
950	36.0
955	36.0
960	36.0
965	36.0
970	36.0
975	36.0
980	36.0
985	36.0
990	35.9
995	35.9
1000	35.9



100 Davids Drive, Hauppauge, NY 11788
 TEL.: (631) 439-9220 • FAX: (631) 436-7430
 e-mail: components@miteq.com • www.miteq.com

MITEQ AM-1331 & AM-1412 SERIES AMPLIFIER

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
0.3	-19	-23
15	-18	-39
30	-18	-41
45	-17	-41
60	-17	-41
75	-17	-40
90	-17	-39
105	-17	-38
120	-17	-38
135	-17	-37
150	-17	-36
165	-17	-35
180	-16	-34
195	-16	-34
210	-16	-33
225	-16	-33
240	-16	-33
255	-16	-32
270	-16	-31
285	-15	-30
300	-15	-30
315	-15	-29
330	-15	-29
345	-15	-29
360	-15	-28
375	-15	-28
390	-15	-27
405	-14	-27
420	-14	-27
435	-14	-27
450	-14	-26
465	-14	-26
480	-14	-26
495	-14	-26
510	-14	-26
525	-14	-26
540	-14	-26
555	-14	-26
570	-14	-26
585	-14	-26
600	-14	-26
615	-14	-26
630	-14	-26
645	-14	-25
660	-14	-25
675	-14	-24
690	-14	-24
705	-14	-24
720	-14	-23
735	-14	-23
750	-14	-23
765	-14	-23
780	-14	-23
795	-14	-22
810	-14	-22
825	-14	-22

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
840	-14	-22
855	-14	-22
870	-14	-22
885	-14	-22
900	-14	-22
915	-14	-22
930	-14	-22
945	-14	-22
960	-14	-22
975	-14	-22
990	-14	-22
1005	-14	-22
1020	-14	-22
1035	-14	-22
1050	-14	-22
1065	-14	-22
1080	-14	-21
1095	-14	-21
1110	-14	-21
1125	-14	-21
1140	-14	-21
1155	-14	-21
1170	-14	-21
1185	-14	-21
1200	-14	-21
1215	-14	-20
1230	-14	-20
1245	-14	-20
1260	-14	-20
1275	-14	-20
1290	-14	-20
1305	-14	-20
1320	-14	-20
1335	-14	-20
1350	-14	-20
1365	-14	-20
1380	-14	-20
1395	-14	-19
1410	-13	-19
1425	-13	-19
1440	-13	-19
1455	-13	-19
1470	-13	-19
1485	-13	-19
1500	-13	-19
1515	-13	-19
1530	-13	-19
1545	-13	-19
1560	-13	-19
1575	-13	-19
1590	-13	-19
1605	-13	-19
1620	-13	-19
1635	-13	-19
1650	-13	-18
1665	-13	-18

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
1680	-13	-18
1695	-13	-18
1710	-13	-18
1725	-12	-18
1740	-12	-18
1755	-12	-18
1770	-12	-18
1785	-12	-18
1800	-12	-18
1815	-12	-18
1830	-12	-17
1845	-12	-17
1860	-12	-17
1875	-12	-17
1890	-12	-17
1905	-12	-17
1920	-12	-17
1935	-12	-17
1950	-12	-17
1965	-12	-17
1980	-11	-17
1995	-11	-17
2010	-11	-17
2025	-11	-17
2040	-11	-17
2055	-11	-17
2070	-11	-17
2085	-11	-17
2100	-11	-17
2115	-11	-17
2130	-11	-17
2145	-11	-17
2160	-11	-17
2175	-11	-17
2190	-11	-17
2205	-11	-17
2220	-11	-16
2235	-11	-16
2250	-11	-16
2265	-11	-16
2280	-11	-16
2295	-11	-16
2310	-11	-16
2325	-11	-16
2340	-11	-16
2355	-11	-16
2370	-11	-16
2385	-11	-16
2400	-11	-16
2415	-11	-16
2430	-11	-16
2445	-11	-16
2460	-11	-16
2475	-11	-16
2490	-11	-16
2505	-11	-16

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
2520	-11	-16
2535	-11	-16
2550	-11	-15
2565	-11	-15
2580	-11	-15
2595	-11	-15
2610	-11	-15
2625	-11	-15
2640	-11	-15
2655	-11	-15
2670	-11	-15
2685	-11	-15
2700	-11	-15
2715	-11	-15
2730	-12	-15
2745	-12	-15
2760	-12	-15
2775	-12	-15
2790	-12	-15
2805	-12	-15
2820	-13	-15
2835	-13	-15
2850	-13	-15
2865	-13	-15
2880	-13	-15
2895	-13	-14
2910	-13	-14
2925	-14	-14
2940	-14	-14
2955	-14	-14
2970	-14	-14
2985	-14	-14
3000	-15	-14



100 Davids Drive, Hauppauge, NY 11788
 TEL.: (631) 439-9220 • FAX: (631) 436-7430
 e-mail: components@miteq.com • www.miteq.com

MITEQ AM-1331 & AM-1412 SERIES AMPLIFIER

Freq. (MHz)	Reverse Isolation (dB)
0	-65
15	-65
30	-65
45	-64
60	-65
75	-65
90	-64
105	-64
120	-64
135	-64
150	-64
165	-64
180	-64
195	-64
210	-64
225	-64
240	-64
255	-64
270	-64
285	-64
300	-65
315	-64
330	-64
345	-64
360	-64
375	-64
390	-64
405	-64
420	-64
435	-64
450	-64
465	-64
480	-64
495	-64
510	-64
525	-64
540	-64
555	-64
570	-63
585	-64
600	-64
615	-64
630	-64
645	-64
660	-64
675	-63
690	-64
705	-64
720	-64
735	-64
750	-64
765	-64
780	-64
795	-64
810	-64
825	-64

Freq. (MHz)	Reverse Isolation (dB)
840	-64
855	-64
870	-64
885	-64
900	-64
915	-64
930	-63
945	-63
960	-64
975	-64
990	-64
1005	-64
1020	-64
1035	-64
1050	-63
1065	-64
1080	-64
1095	-64
1110	-64
1125	-65
1140	-64
1155	-64
1170	-64
1185	-64
1200	-64
1215	-64
1230	-64
1245	-65
1260	-64
1275	-64
1290	-64
1305	-64
1320	-64
1335	-64
1350	-65
1365	-65
1380	-64
1395	-65
1410	-65
1425	-65
1440	-64
1455	-65
1470	-65
1485	-65
1500	-65
1515	-65
1530	-65
1545	-65
1560	-65
1575	-65
1590	-65
1605	-65
1620	-66
1635	-65
1650	-65
1665	-65

Freq. (MHz)	Reverse Isolation (dB)
1680	-65
1695	-65
1710	-66
1725	-66
1740	-66
1755	-66
1770	-66
1785	-66
1800	-66
1815	-66
1830	-66
1845	-66
1860	-66
1875	-66
1890	-66
1905	-66
1920	-66
1935	-66
1950	-66
1965	-67
1980	-67
1995	-67
2010	-67
2025	-66
2040	-67
2055	-67
2070	-68
2085	-68
2100	-68
2115	-69
2130	-68
2145	-68
2160	-67
2175	-67
2190	-68
2205	-67
2220	-67
2235	-67
2250	-68
2265	-68
2280	-69
2295	-68
2310	-68
2325	-69
2340	-68
2355	-67
2370	-67
2385	-68
2400	-68
2415	-69
2430	-69
2445	-68
2460	-69
2475	-69
2490	-69
2505	-69

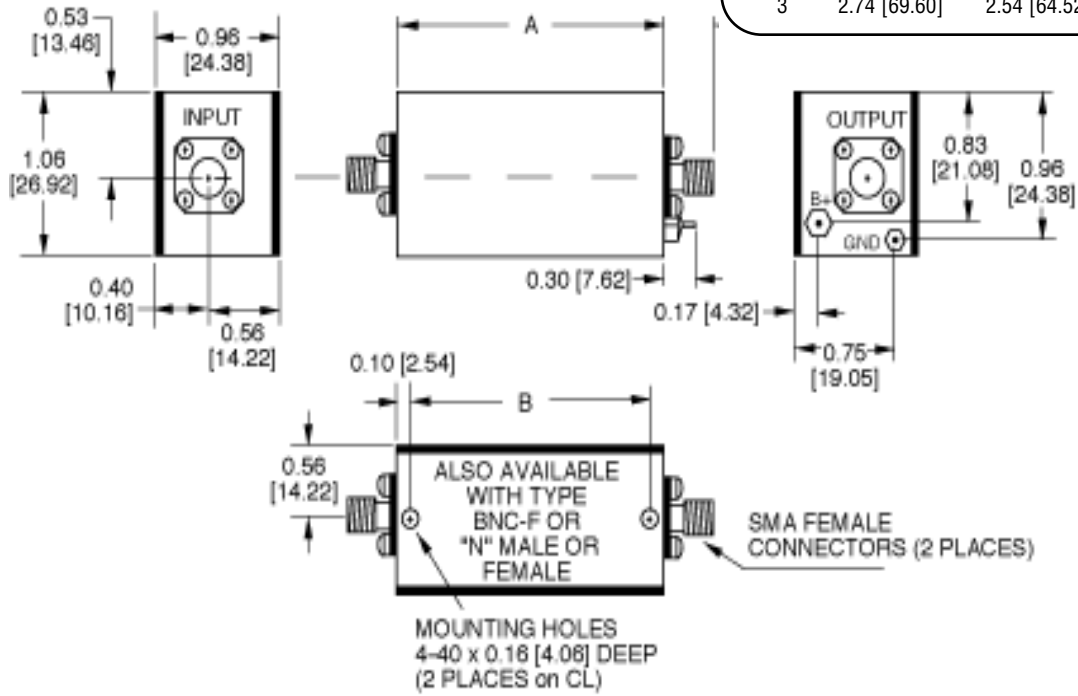
Freq. (MHz)	Reverse Isolation (dB)
2520	-69
2535	-69
2550	-69
2565	-68
2580	-69
2595	-70
2610	-69
2625	-69
2640	-69
2655	-69
2670	-69
2685	-69
2700	-69
2715	-69
2730	-68
2745	-69
2760	-69
2775	-69
2790	-69
2805	-69
2820	-68
2835	-69
2850	-68
2865	-69
2880	-68
2895	-68
2910	-68
2925	-68
2940	-68
2955	-69
2970	-69
2985	-68
3000	-68



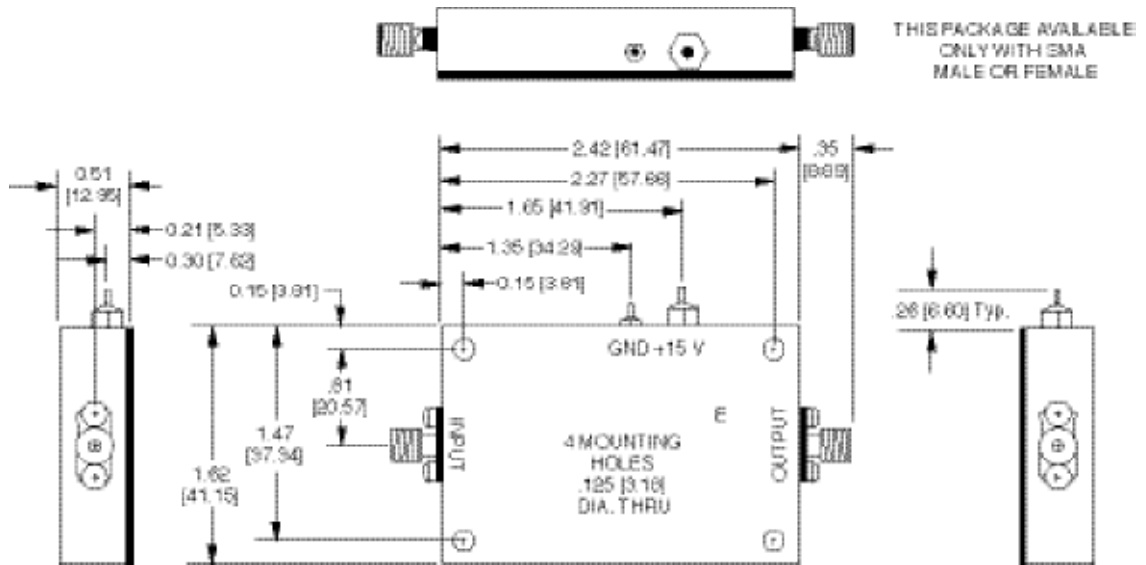
100 Davids Drive, Hauppauge, NY 11788
 TEL.: (631) 439-9220 • FAX: (631) 436-7430
 e-mail: components@miteq.com • www.miteq.com

MITEQ AM-1331 & AM-1412 SERIES AMPLIFIER

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



OUTLINE 8



NOTE: DIMENSIONS ARE IN INCHES [MILLIMETERS].



100 Davids Drive, Hauppauge, NY 11788
 TEL.: (631) 439-9220 • FAX: (631) 436-7430
 e-mail: components@miteq.com • www.miteq.com

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

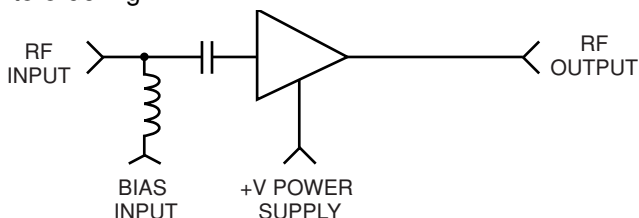
Add Suffix "-1306/E" or "-1306/D"

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

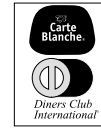


100 Davids Drive, Hauppauge, NY 11788
TEL.: (631) 439-9220 • FAX: (631) 436-7430
e-mail: components@miteq.com • www.miteq.com

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



100 Davids Drive, Hauppauge, NY 11788
TEL.: (631) 439-9220 • FAX: (631) 436-7430
e-mail: components@miteq.com • www.miteq.com