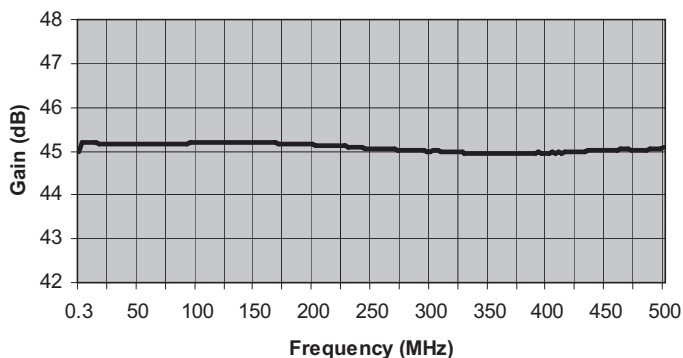


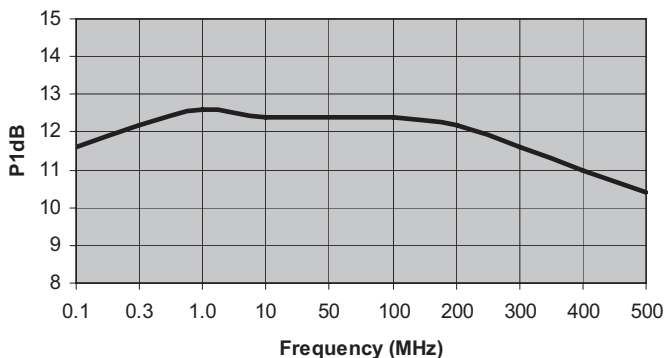
MITEQ AU-3A-0150 AMPLIFIER

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.
0.3-500	AU-3A-0150	44	0.5	2.0:1	50/50	1.4	11	15	75	3

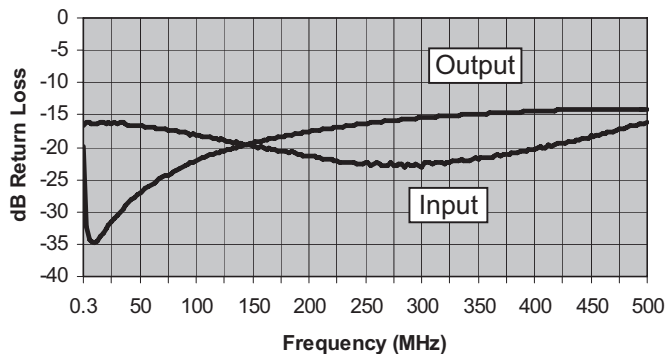
Gain (dB)



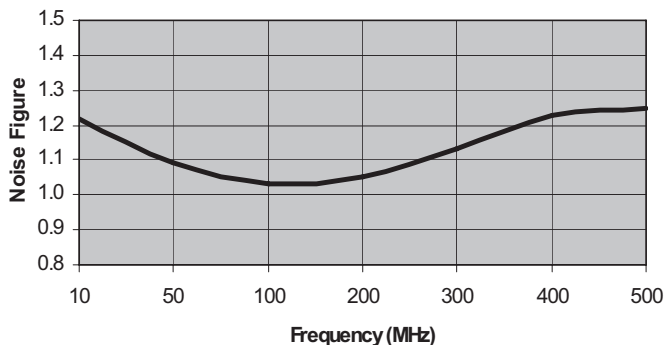
Output -1dB Gain Compression (+dBm)



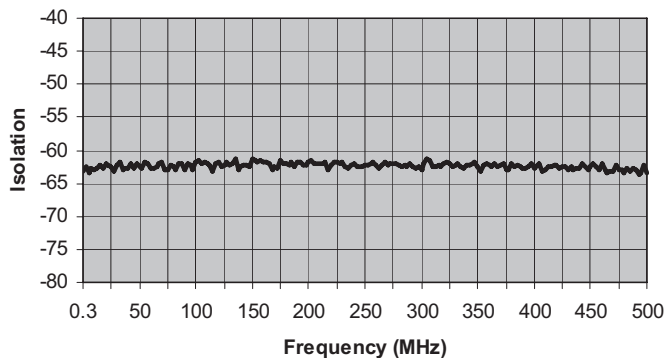
Input & Output Return Loss (dBRL)



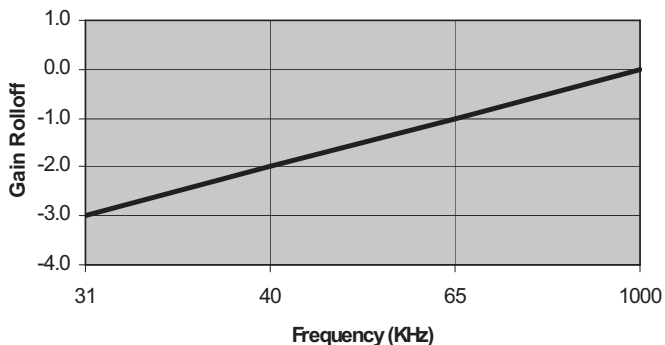
Noise Figure (dB)



Reverse Isolation (dB)



Low Frequency Gain Rolloff (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 AU-3A-0150 AMPLIFIER

Freq. (MHz)	Gain (dB)
0.3	45.0
3	45.2
5	45.2
8	45.2
10	45.2
13	45.2
15	45.2
18	45.2
20	45.2
23	45.2
25	45.2
28	45.2
30	45.2
33	45.2
35	45.2
38	45.2
40	45.2
43	45.2
45	45.2
48	45.2
50	45.2
53	45.2
55	45.2
58	45.2
60	45.2
63	45.2
65	45.2
68	45.2
70	45.2
73	45.2
75	45.2
78	45.2
80	45.2
83	45.2
85	45.2
88	45.2
90	45.2
93	45.2
95	45.2
98	45.2
100	45.2
103	45.2
105	45.2
108	45.2
110	45.2
113	45.2
115	45.2
118	45.2
120	45.2
123	45.2
125	45.2
128	45.2
130	45.2
133	45.2
135	45.2
138	45.2
140	45.2

Freq. (MHz)	Gain (dB)
143	45.2
145	45.2
148	45.2
150	45.2
153	45.2
155	45.2
158	45.2
160	45.2
163	45.2
165	45.2
168	45.2
170	45.2
173	45.2
175	45.2
178	45.2
180	45.2
183	45.2
185	45.2
188	45.2
190	45.2
193	45.2
195	45.2
198	45.2
200	45.2
203	45.1
205	45.1
208	45.1
210	45.1
213	45.1
215	45.1
218	45.1
220	45.1
223	45.1
225	45.1
228	45.1
230	45.1
233	45.1
235	45.1
238	45.1
240	45.1
243	45.1
245	45.1
248	45.1
250	45.1
253	45.1
255	45.1
258	45.1
260	45.1
263	45.1
265	45.0
268	45.0
270	45.0
273	45.0
275	45.0
278	45.0
280	45.0
283	45.0

Freq. (MHz)	Gain (dB)
285	45.0
288	45.0
290	45.0
293	45.0
295	45.0
298	45.0
300	45.0
303	45.0
305	45.0
308	45.0
310	45.0
313	45.0
315	45.0
318	45.0
320	45.0
323	45.0
325	45.0
328	45.0
330	45.0
333	45.0
335	45.0
338	45.0
340	45.0
343	45.0
345	45.0
348	45.0
350	45.0
353	45.0
355	45.0
358	45.0
360	45.0
363	45.0
365	45.0
368	45.0
370	45.0
373	45.0
375	45.0
378	45.0
380	45.0
383	45.0
385	45.0
388	45.0
390	45.0
393	45.0
395	45.0
398	45.0
400	45.0
403	45.0
405	45.0
408	45.0
410	45.0
413	45.0
415	45.0
418	45.0
420	45.0
423	45.0
425	45.0

Freq. (MHz)	Gain (dB)
428	45.0
430	45.0
433	45.0
435	45.0
438	45.0
440	45.0
443	45.0
445	45.0
448	45.0
450	45.0
453	45.0
455	45.0
458	45.0
460	45.0
463	45.0
465	45.0
468	45.0
470	45.0
473	45.0
475	45.0
478	45.0
480	45.0
483	45.0
485	45.0
488	45.0
490	45.0
493	45.1
495	45.1
498	45.1
500	45.1



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

MITEQ AU-3A-0150 AMPLIFIER

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
0.3	-17	-20
3	-16	-32
5	-16	-34
8	-16	-35
10	-16	-35
13	-16	-34
15	-16	-34
18	-16	-33
20	-16	-33
23	-16	-32
25	-16	-32
28	-16	-31
30	-16	-30
33	-16	-30
35	-16	-29
38	-16	-29
40	-17	-29
43	-17	-28
45	-17	-28
48	-17	-27
50	-17	-27
53	-17	-27
55	-17	-26
58	-17	-26
60	-17	-26
63	-17	-26
65	-17	-25
68	-17	-25
70	-17	-25
73	-17	-24
75	-17	-24
78	-17	-24
80	-18	-24
83	-18	-24
85	-18	-23
88	-18	-23
90	-18	-23
93	-18	-23
95	-18	-22
98	-18	-22
100	-18	-22
103	-18	-22
105	-18	-22
108	-18	-22
110	-18	-21
113	-18	-21
115	-19	-21
118	-19	-21
120	-19	-21
123	-19	-21
125	-19	-21
128	-19	-20
130	-19	-20
133	-19	-20
135	-19	-20
138	-19	-20
140	-19	-20
143	-20	-20
145	-20	-20
148	-20	-19
150	-20	-19
153	-20	-19
155	-20	-19

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
158	-20	-19
160	-20	-19
163	-20	-19
165	-20	-19
168	-20	-19
170	-20	-19
173	-20	-18
175	-21	-18
178	-21	-18
180	-21	-18
183	-21	-18
185	-21	-18
188	-21	-18
190	-21	-18
193	-21	-18
195	-21	-18
198	-21	-18
200	-21	-18
203	-21	-18
205	-21	-17
208	-22	-17
210	-22	-17
213	-22	-17
215	-22	-17
218	-22	-17
220	-22	-17
223	-22	-17
225	-22	-17
228	-22	-17
230	-22	-17
233	-22	-17
235	-22	-17
238	-22	-17
240	-22	-17
243	-22	-17
245	-23	-16
248	-23	-16
250	-22	-16
253	-22	-16
255	-23	-16
258	-23	-16
260	-22	-16
263	-23	-16
265	-23	-16
268	-23	-16
270	-23	-16
273	-22	-16
275	-23	-16
278	-23	-16
280	-23	-16
283	-23	-16
285	-23	-16
288	-23	-16
290	-23	-16
293	-23	-16
295	-23	-16
298	-23	-16
300	-23	-15
303	-22	-15
305	-22	-15
308	-22	-15
310	-23	-15
313	-22	-15

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
315	-22	-15
318	-22	-15
320	-23	-15
323	-22	-15
325	-22	-15
328	-22	-15
330	-22	-15
333	-22	-15
335	-22	-15
338	-22	-15
340	-22	-15
343	-22	-15
345	-22	-15
348	-22	-15
350	-22	-15
353	-22	-15
355	-22	-15
358	-22	-15
360	-22	-15
363	-22	-15
365	-21	-15
368	-21	-15
370	-21	-15
373	-21	-15
375	-21	-15
378	-21	-15
380	-21	-15
383	-21	-15
385	-21	-15
388	-21	-15
390	-21	-15
393	-21	-14
395	-20	-14
398	-20	-14
400	-20	-14
403	-20	-14
405	-20	-14
408	-20	-14
410	-20	-14
413	-20	-14
415	-20	-14
418	-20	-14
420	-19	-14
423	-19	-14
425	-19	-14
428	-19	-14
430	-19	-14
433	-19	-14
435	-19	-14
438	-19	-14
440	-19	-14
443	-19	-14
445	-19	-14
448	-19	-14
450	-18	-14
453	-18	-14
455	-18	-14
458	-18	-14
460	-18	-14
463	-18	-14
465	-18	-14
468	-18	-14
470	-18	-14

Freq. (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
473	-17	-14
475	-17	-14
478	-17	-14
480	-17	-14
483	-17	-14
485	-17	-14
488	-17	-14
490	-17	-14
493	-17	-14
495	-16	-14
498	-16	-14
500	-16	-14



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

MITEQ AU-3A-0150 AMPLIFIER

Freq. (MHz)	Reverse Isolation (dB)
0.3	-63
3	-63
5	-63
8	-63
10	-63
13	-63
15	-62
18	-63
20	-62
23	-62
25	-63
28	-63
30	-62
33	-62
35	-63
38	-63
40	-63
43	-62
45	-63
48	-62
50	-62
53	-63
55	-62
58	-62
60	-63
63	-63
65	-62
68	-62
70	-62
73	-63
75	-63
78	-62
80	-63
83	-63
85	-62
88	-62
90	-63
93	-62
95	-62
98	-63
100	-62
103	-62
105	-62
108	-62
110	-62
113	-62
115	-63
118	-62
120	-62
123	-62
125	-62
128	-62
130	-62
133	-62
135	-61
138	-63

Freq. (MHz)	Reverse Isolation (dB)
140	-62
143	-62
145	-62
148	-63
150	-61
153	-61
155	-62
158	-62
160	-62
163	-62
165	-62
168	-63
170	-62
173	-63
175	-62
178	-62
180	-62
183	-62
185	-62
188	-62
190	-62
193	-62
195	-62
198	-62
200	-62
203	-61
205	-62
208	-62
210	-62
213	-62
215	-62
218	-63
220	-62
223	-62
225	-62
228	-62
230	-62
233	-62
235	-63
238	-62
240	-62
243	-62
245	-63
248	-62
250	-62
253	-62
255	-62
258	-62
260	-62
263	-63
265	-62
268	-62
270	-62
273	-62
275	-62
278	-62

Freq. (MHz)	Reverse Isolation (dB)
280	-62
283	-63
285	-62
288	-62
290	-62
293	-63
295	-63
298	-62
300	-63
303	-62
305	-61
308	-62
310	-63
313	-62
315	-62
318	-63
320	-62
323	-62
325	-62
328	-63
330	-62
333	-62
335	-63
338	-63
340	-62
343	-62
345	-62
348	-62
350	-62
353	-63
355	-62
358	-62
360	-62
363	-62
365	-62
368	-62
370	-62
373	-62
375	-63
378	-63
380	-62
383	-63
385	-62
388	-62
390	-63
393	-63
395	-62
398	-62
400	-63
403	-62
405	-62
408	-63
410	-63
413	-62
415	-63
418	-62

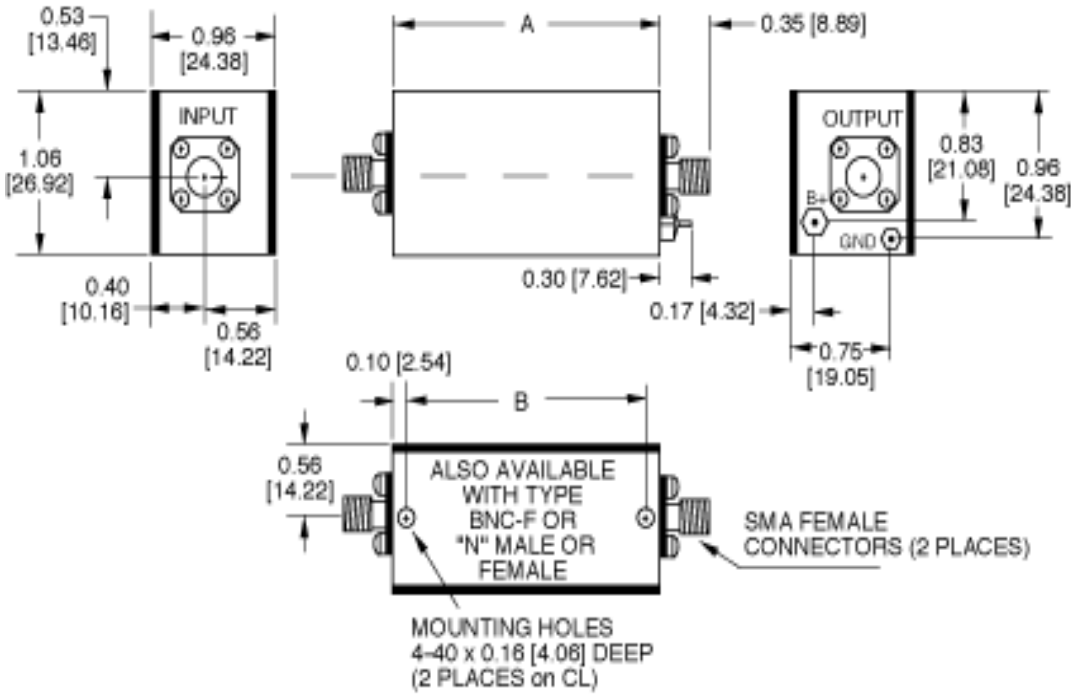
Freq. (MHz)	Reverse Isolation (dB)
420	-62
423	-63
425	-62
428	-63
430	-63
433	-62
435	-63
438	-63
440	-63
443	-62
445	-63
448	-63
450	-63
453	-62
455	-63
458	-63
460	-62
463	-63
465	-63
468	-63
470	-63
473	-62
475	-63
478	-63
480	-63
483	-63
485	-63
488	-63
490	-63
493	-64
495	-63
498	-62
500	-63



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

MITEQ AU-3A-0150 AMPLIFIER

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



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

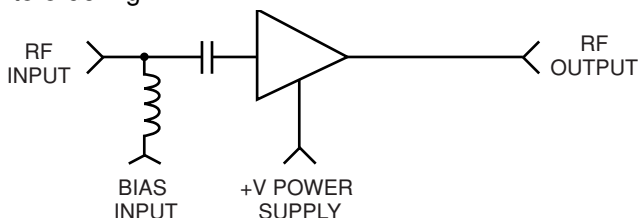
Add Suffix “-1306/E” or “-1306/D”

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