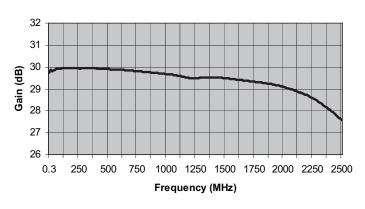
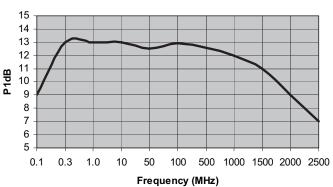
FREQUENCY (MHz)	MODEL NUMBER	GAIN (dB) (Min.)	VAR. (±dB) (Max.)	VSWR (Max.)	IMPED. IN/OUT (Ohms)	NOISE FIGURE (dB, Typ.)	P1 dB (dBm) (Typ.)	VOLTS	NOM. DC POWER (mA)	OUTLINE NO.
1–1000	AM-1185-1000	28	0.5	2.0:1	50/50	3.4	12	15	115	2
1–2000	AM-1185-2000	28	1	2.0:1	50/50	3.5	10	15	115	2

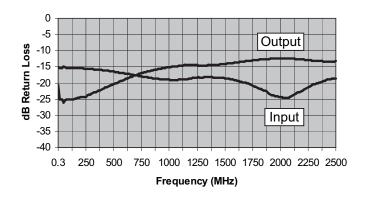
Gain (dB)



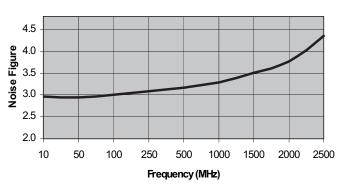
Output -1dB Gain Compression (+dBm)



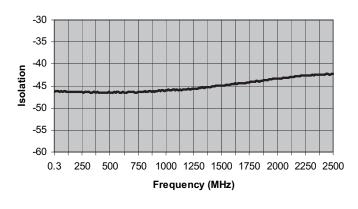
Input & Output Return Loss (dBRL)



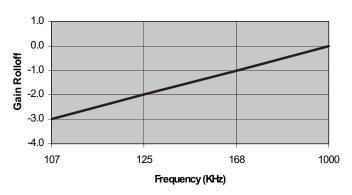
Noise Figure (dB)



Reverse Isolation (dB)



Low Frequency Gain Rolloff (dB)



ISO 9001:2000 Certified • General Infomation • Warranty



Freq	Gain
(MHz)	(dB)
0.3	29.7
13	29.9
25	29.8
38	29.9
50	29.9
63	29.9
75	29.9
88	29.9
100	29.9
113	30.0
125	30.0
138	30.0
150	30.0
163	30.0
175	29.9
188	29.9
200	29.9
213	29.9
225	29.9
238	29.9
250	29.9
263	29.9
275	29.9
288	29.9
300	29.9
313	29.9
325	29.9
338	29.9
350	29.9
363	29.9
375	29.9
388	29.9
400	29.9
413	29.9
425	29.9
438	29.9
450	29.9
463	29.9
475	29.9
488	29.9
500	29.9
513	29.9
525	29.9
538	29.9
550	29.9
563	29.9
575	29.9
588	29.9
600	29.9
613	29.9
625	29.9
638	29.9
650	29.9
663	29.9
675	29.9
688	29.8
700	29.8

Freq	Gain
(MHz)	(dB)
713	29.8
725	29.8
738	29.8
750	29.8
763	29.8
775	29.8
788	29.8
800	29.8
813	29.8
825	29.8
838	29.8
850	29.8
863	29.8
875	29.7
888	
900	29.7
	29.7
913	29.7
925	29.7
938	29.7
950	29.7
963	29.7
975	29.7
988	29.7
1000	29.7
1013	29.7
1025	29.7
1038	29.7
1050	29.7
1063	29.6
1075	29.6
1088	29.6
1100	29.6
1113	29.6
1125	29.6
1138	29.6
1150	29.5
1163	29.5
1175	29.5
1188	29.5
1200	29.5
1213	29.5
1215	29.5
1238	29.5
1250	29.5
1263	29.5
1275	29.5
1288	29.5
1300	29.5
1313	29.5
1325	29.5
1338	29.5
1350	29.5
1363	29.5
1375	29.5
1388	29.5
1400	29.5
1413	29.5

Freq	Gain
(MHz)	(dB)
1425	29.5
1438	29.5
1450	29.5
1463	29.5
1475	29.5
1488	29.5
1500	29.5
1513	29.5
1525	29.5
1538	29.5
1550	29.5
1563	29.5
1575	29.4
1588	29.4
1600	29.4
1613	29.4
1625	29.4
1638	29.4
1650	29.4
1663	29.4
1675	29.4
1688	29.4
1700	29.4
1713	29.4
1725	29.3
1738	29.3
1750	29.3
1763	29.3
1775	29.3
1788	29.3
1800	29.3
1813	29.3
1825	29.3
1838	29.3
1850	29.3
1863	29.3
1875	29.2
1888	29.2
1900	29.2
1010	
1913	29.2
1925	29.2 29.2
	29.2
1950	
1963	29.1
1975	29.1
1988	29.1
2000	29.1
2013	29.1
2025	29.1
2038	29.0
2050	29.0
2063	29.0
2075	29.0
2088	28.9
2100	28.9
2113	28.9
2125	28.9
	20.5

Freq	Gain
(MHz)	(dB)
2138	28.9
2150	28.8
2163	28.8
2175	28.8
2188	28.7
2200	28.7
2213	28.7
2225	28.6
2238	28.6
2250	28.6
2263	28.5
2275	28.5
2288	28.5
2300	28.4
2313	28.4
2325	28.3
2338	28.3
2350	28.2
2363	28.2
2375	28.1
2388	28.1
2400	28.0
2413	28.0
2425	27.9
2438	27.9
2450	27.8
2463	27.8
2475	27.7
2488	27.6
2500	27.6



Freq (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
0.3	-15	-21
13	-15	-25
25	-15	-25
38	-15	-25
50	-15	-26
63	-15	-25
75	-15	-25
88	-15	-25
100	-15	-25
113	-15	-25
125	-15	-25
138	-15	-25
150	-15	-25
163	-15	-25
175	-15	-25
188	-15	-25
200	-16	-24
213	-16	-24
225	-16	-24
238	-16	-24
250	-16	-24
263	-16	-24
275	-16	-24
288	-16	-24
300	-16	-23
313	-16	-23
325	-16	-23
338	-16	-23
350	-16	-23
363	-16	-22
375	-16	-22
388	-16	-22
400	-16	-22
413	-16	-22
425	-16	-21
438	-16	-21
450	-16	-21
463	-16	-21
475	-16	-21
488	-16	-21
500	-16	-20
513	-17 -17	-20
525 538	-17	-20 -20
550	-17	-20 -20
563	-17	-20 -19
575	-17	-19
588	-17	-19
600	-17	-19
613	-17	-19
625	-17	-19
638	-17	-18
650	-17	-18
663	-17	-18
675	-17	-18
688	-17	-18
700	-18	-18
713	-18	-10
715	-18	-17
738	-18	-17
750	-18	-17
763	-18	-17
	- 10	- 17

Freq (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
788	-18	-17
800	-18	-16
813	-18	-16
825	-18	-16
838	-18	-16
850	-19	-16
863	-19	-16
875	-19	-16
888	-19	-16
900	-19	-16
913	-19	-16
925	-19	-16
938	-19	-15
950	-19	-15
963	-19	-15
975	-19	-15
988	-19	-15
1000	-19	-15
1013	-19	-15
1025	-19	-15
1038	-19	-15
1050	-19	-15
1063	-19	-15
1075	-19	-15
1088	-19	-15
1100	-19	-15
1113	-19	-15
1125	-19	-15
1138	-19	-15
1150	-19	-14
1163	-19	-14
1175	-19	-14
1188	-19	-14
1200	-19	-14
1213	-19	-14
1225	-18	-14
1238	-18	-14
1250	-18	-15
1263	-18	-15
1275	-18	-15
1288	-18	-15
1300	-18	-15
1313	-18	-15
1325	-18	-15
1338	-18	-15
1350	-18	-15
1363	-18	-15
1375	-18	-15
1388	-18	-14
1400	-18	-14
1413	-18	-14
1425	-18	-14
1438	-18	-14
1450	-18	-14
1463	-18	-14
1475	-19	-14
1488	-19	-14
1500	-19	-14
1513	-19	-14
1525	-19	-14
1538	-19	-14
1550	-19	-14
4500	10	1.4

Freq (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
1575	-19	-14
1588	-19	-14
1600	-19	-14
1613	-19	-14
1625	-19	-14
1638	-20	-13
1650	-20	-13
1663	-20	-13
1675	-20	-13
1688	-20	-13
1700	-20	-13
1713	-20	-13
1725	-20	-13
1738	-21	-13
1750	-21	-13
1763	-21	-13
1775	-21	-13
1775		-13
	-21	
1800	-22	-13
1813	-22	-13
1825	-22	-13
1838	-22	-13
1850	-22	-13
1863	-22	-13
1875	-23	-13
1888	-23	-13
1900	-23	-13
1913	-24	-13
1925	-24	-13
	-24	
1938		-12
1950	-24	-12
1963	-24	-12
1975	-24	-12
1988	-24	-12
2000	-24	-12
2013	-24	-12
2025	-25	-12
2038	-25	-12
2050	-25	-12
2063	-25	-12
2075	-25	-12
2088	-24	-12
2100	-24	-12
2113	-24	-13
2125	-24	-13
2138	-23	-13
2150	-23	-13
2163	-23	-13
2175	-23	-13
2188	-23	-13
2200	-22	-13
2213	-22	-13
2225	-22	-13
2238	-22	-13
2250	-21	-13
2263	-21	-13
2275	-21	-13
2288	-21	-13
2300	-20	-13
2313	-20	-13
2325	-20	-13
2338	-20	-13

Freq (MHz)	Input VSWR (dBRL)	Output VSWR (dBRL)
2363	-20	-13
2375	-20	-13
2388	-19	-13
2400	-19	-13
2413	-19	-13
2425	-19	-13
2438	-19	-13
2450	-19	-13
2463	-19	-13
2475	-19	-13
2488	-19	-13
2500	-19	-13



1563

-19

-14

(dB)

-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-47
-46
-46
-46
-46
-47
-46
-46
-46
-47
-46
-47
-46
-46
-46
-46
-47
-46
-46
-40 -46
-47
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46
-46

Freq	Reverse Isolation
(MHz)	(dB)
	<u>(ав)</u> -46
700	
713	-46
725	-46
738	-46
750	-46
763	-46
775	-46
788	-46
800	-46
813	-46
825	-46
838	-46
850	-46
863	-46
875	-46
888	-46
900	-46
913	-46
925	-46
938	-46
950	-46
963	-46
975	-46
988	-46
1000	-46
1013	-46
1025	-46
1038	-46
1050	-46
1063	-46
1075	-46
1088	-46
1100	-46
1113	-46
1113	
1138	-46 46
	-46
1150	-46
1163	-46
1175	-46
1188	-46
1200	-46
1213	-46
1225	-46
1238	-46
1250	-46
1263	-46
1275	-46
1288	-46
1300	-45
1313	-45
1325	-45
1338	-45 -45
1350	-45 -45
1363	-45 45
1375 1388	-45 -45
	-/15

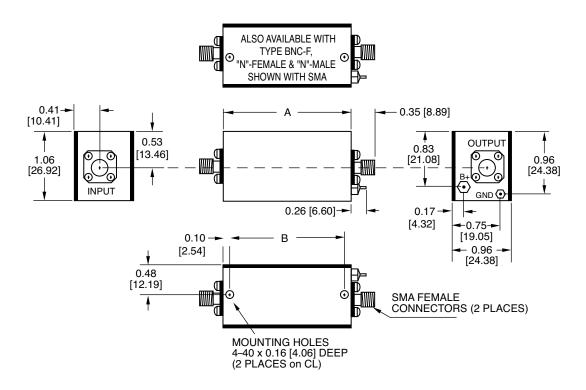
	Reverse
Freq	Isolation
(MHz)	(dB)
1400	-45
1413	-45
1425	-45
1438	-45
1450	-45
1463	-45
1475	-45
1488	-45
1500	-45
1513	-45
1525	-45
1538	-45
1550	-45
1563	-45
1575	- 4 5
1588	- 4 5
1600	- 4 5
1613	-43 -44
	- 44 -44
1625	- 44 -45
1638	-45 -44
1650	
1663	-44
1675	-44
1688	-44
1700	-44
1713	-44
1725	-44
1738	-44
1750	-44
1763	-44
1775	-44
1788	-44
1800	-44
1813	-44
1825	-44
1838	-44
1850	-44
1863	-44
1875	-44
1888	-44
1900	-44
1913	-44
1925	-44
1938	-44
1950	-43
1963	-43
1975	-43
1988	-43
2000	-43
2013	-43 -43
2013	-43 -43
	-43 -43
2038	
2050	-43
2063	-43
2075	-43
2088	-43

	Reverse
Eroa	Isolation
Freq	
(MHz)	(dB)
2100	-43
2113	-43
2125	-43
2138	-43
2150	-43
2163	-43
2175	-43
2188	-43
2200	-43
2213	-43
2225	-43
2238	-43
2250	-43
2263	-43
2275	-43
2288	-43
2300	-43
2313	-42
2325	-43
2338	-42
2350	-42
2363	-42
2375	-42
2388	-42
2400	-42
2413	-42
2425	-42
2438	-42
2450	-42
2463	-42
2475	-42
2488	-42
2500	-42



MITEQ AM-1185 SERIES - OUTLINE DRAWINGS

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



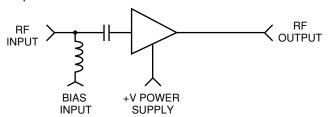
NOTE: DIMENSIONS ARE IN INCHES [MILLIMETERS].



OPTIONS FOR BIPOLAR AMPLIFIERS

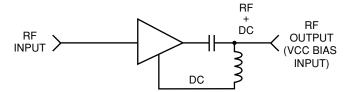
INPUT BIAS TEE Add Suffix "-F"

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.



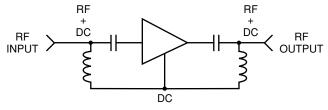
BIAS THROUGH THE OUTPUT CONNECTOR Add Suffix "-1306/E" or "-1306/D"

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

<u>OPTION</u>	SUFFIX
Gain Window	-GW
Phase Match	-PM
Amplitude Match	-AM
Gain Control	-GC

ISO 9001:2000 CERTIFIED

MITEQ attained its original ISO 9001 registration in June 1993, when fewer than 1500 companies were registered. ISO 9001 has since become a recognized standard for quality in over 90 countries. Nationally, it is accepted by an ever-increasing number of government agencies in place of longstanding military specifications covering quality and inspection criteria. Among those are MIL-Q-9858 and MIL-I-45208.



MITEQ's quality system is certified to ISO 9001 by National Quality Assurance USA (NQA), an accredited registrar of the American National Standards Institute -

Registration Accreditation Board (ANSI-RAB). NQA performs a quality audit at MITEQ every six months to assure continued compliance to the standard. Additionally, MITEQ's internal auditing system, coupled with regular management reviews, assures that the quality system is effective, updated and constantly improved.

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.



WARRANTY

- 1. MITEQ, Inc. warrants to the purchaser that each of its products, when shipped will be free from defects in material and workmanship and will perform in full accordance with applicable specifications. The limit of liability under this warranty is at MITEQ, Inc.'s option to repair or replace any product or part thereof which shall within: (a) three years of delivery for indoor equipment, (b) two years of delivery for outdoor equipment and (c) one year of delivery for integrated assemblies or equipment having RF output powers equal to or greater than +24 dBm, be returned by the purchaser to MITEQ, Inc., at 100 Davids Drive, Hauppauge, New York, 11788, and shall, as determined by examination by MITEQ, Inc., prove defective in material and/or workmanship. Warranty returns must first be authorized in writing by MITEQ, Inc. Disassembly of any MITEQ, Inc. product by anyone other than an authorized representative of MITEQ, Inc. voids this warranty in its entirety. MITEQ, Inc. reserves the right to make changes in any of its products without incurring any obligation to make the same changes on previously delivered products.
- 2. Components and subsystems having been repaired by MITEQ, Inc. shall be warranted for that repair for ninety (90) days. For products that are still within the original warranty period as described above, the original warranty (if longer) will take precedence. For all SATCOM products, that portion of the system that is repaired, will be warrantied for one year.
- 3. As a condition to the warranties provided for herein, the Buyer will prepay the shipping charges for all products returned to MITEQ, Inc. for repair and MITEQ, Inc. will pay the return shipping with the exception of rack mountable hardware returned from outside the United States in which case the buyer will pay the shipping charges.
- 4. The buyer will pay the cost of inspecting and testing any goods returned under the warranty or otherwise which are found to meet the applicable specifications or which are not defective or not covered by the warranty.
- 5. Products sold by MITEQ, Inc. shall not be considered defective or non-conforming to the Buyers' order if they (a) satisfactorily fulfill the performance requirements that were (i) provided by the Buyer to MITEQ, Inc. or (ii) as published in the Sellers' product specification literature, or (b) or in accordance with any written or verbal agreement between the Buyer and MITEQ, Inc., or (c) are in accordance with samples approved by the Buyer. This warranty shall not apply to any products or parts thereof which have been subject to accident, negligence, alteration, abuse or misuse. MITEQ, Inc. makes no warranty whatsoever in respect to accessories or parts not supplied by it.
- 6. Limitations of Warranty, Damages and Liability

EXCEPT AS EXPRESSLY SET FORTH HEREIN, THERE ARE NO WARRANTIES, CONDITIONS, GUARANTEES OR REPRESENTATIONS AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHER WARRANTIES, CONDITIONS, GUARANTEES OR REPRESENTATIONS, WHETHER EXPRESSED OR IMPLIED, IN LAW OR IN FACT, ORAL OR IN WRITING.

MITEQ, INC.'S AGGREGATE LIABILITY IN DAMAGES OR OTHERWISE SHALL NOT EXCEED THE PAYMENT, IF ANY, RECEIVED BY MITEQ, INC. FOR THE UNIT OF PRODUCT OR SERVICE FURNISHED OR TO BE FURNISHED, AS THE CASE MAY BE, WHICH IS THE SUBJECT OF CLAIM OR DISPUTE. IN NO EVENT SHALL MITEQ, INC. BE LIABLE FOR INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES, HOWSOEVER CAUSED.

- 7. All matters regarding this warranty shall be interpreted in accordance with the laws of the State of New York and any controversy that cannot be settled directly shall be settled by arbitration in New York, New York in accordance with the rules then prevailing of the American Arbitration Association, and judgement upon the award rendered may be entered in any court having jurisdiction thereof.
- 8. As required by Article 10(3) and Article 11(2) of Directive 2002/96/EC (WEEE Directive) of the European Parliament and the Council of the European Union, and in accordance with European Standard EN 50419, MITEQ Inc. labels its products with the following symbol:

This symbol indicates that the product cannot be thrown into the trash, and must be collected and treated in accordance with Directive 2002/96/EC and local regulations.

MITEQ FEDERAL SUPPLY CODE

Our Federal Supply Code is: 33592



AM-1185 022707