

Features

- Conversion Gain
- +21 dBm Output Power
- 20 dBc Signal Purity
- Low Current Consumption
- Waveguide/Coax Output Connector Option

AMT Series



Description

The AMT-260X2 and AMT-400X2 are active frequency doublers with outputs covering the full 18-26.5 GHz and 26.5-40 GHz bands respectively. The AMT-460X4 is an active frequency quadrupler covering the frequency band of 43.5-45.5 GHz. All models use post amplification for optimum size and power consumption and all have greater bandwidth capability if needed. Low input power levels, from 350 to 750 mA at +12 VDC, are sufficient to provide output levels from +15 to +21 dBm across the full bands.

These units are packaged in low profile, miniature aluminum packages which allows various output connector options

including waveguide and 3mm coax. Signal purity* of 20-30 dBc across the full output bands allows these units to be used as signal sources for both test equipment and military systems. Updating a test bench to millimeter frequencies is as simple as just adding a doubler or quadrupler at an order of magnitude savings in cost over new equipment.

* Signal purity, the amount of rejection of all signals (fundamental, third harmonic, etc.) except for the desired output signal, is measured relative to the desired output signal in dBc.

AMT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Input Frequency (GHz)	Output Frequency (GHz)	RF Power		Signal Purity (dBc) Maximum	Input Power		Case Type
			Input (dBm) Minimum ²	Output (dBm) Minimum		Voltage (VDC)	Current (mA) Maximum	
AMT-260X2	9.0-13.25	18.0-26.5	+10	+15	-20	12	350	IK4
AMT-261X2	9.0-13.25	18.0-26.5	+10	+21	-20	12	750	IK6
AMT-400X2	13.25-20.0	26.5-40.0	+10	+11	-20	12	200	IK4
AMT-401X2	13.25-20.0	26.5-40.0	+10	+15	-20	12	350	IK6
AMT-460X4	10.87-11.37	43.5-45.5	+10	+10	-30	12	300	IK6 ¹
AMT-461X4	10.87-11.37	43.5-45.5	+10	+20	-30	12	850	IK6 ¹

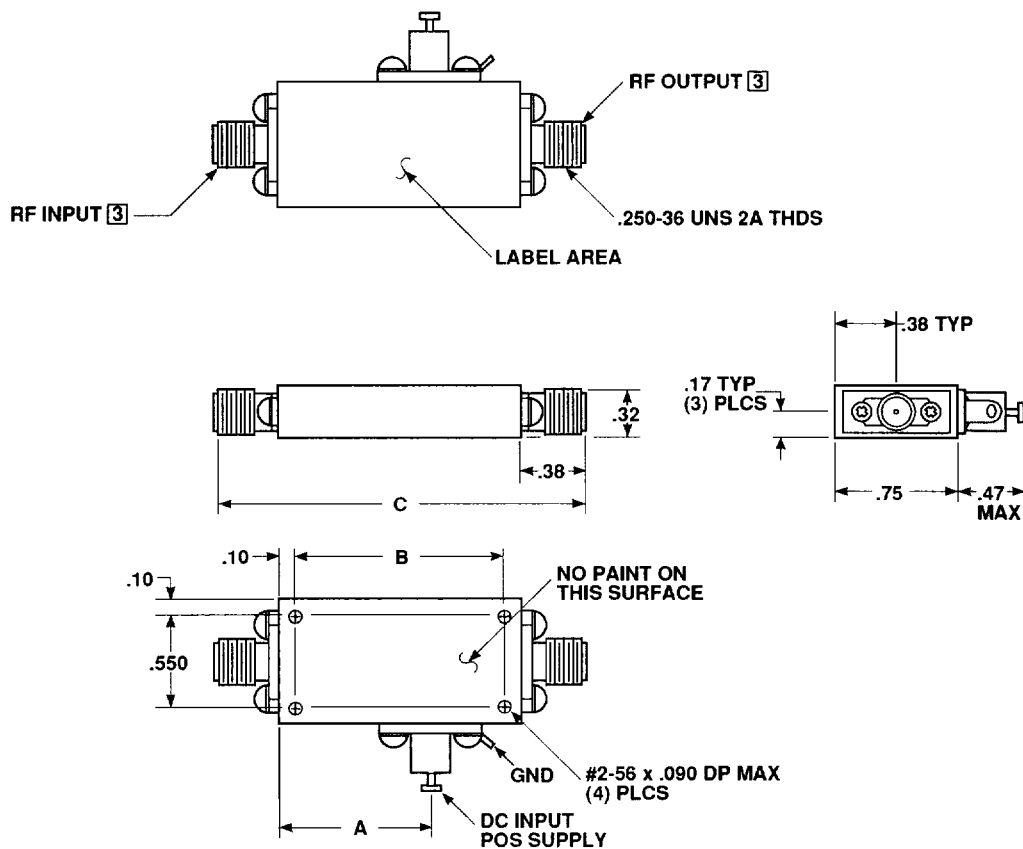
- Notes:
- Maximum safe input power: +20 dBm
 - 1: Input coax isolator
 - 2: Recommended minimum input to achieve listed minimum power output.

The following RF connector options are available for the amplifiers on this page. Please specify option suffix at the time of order.

		INPUT	
		3 mm COAX	
OUTPUT	WG	-31	
	3 mm COAX	-33	

**AMT Series:
Frequency Doublers and Quadruplers**

**Case Drawing
IK Series
Coax**



CASE	DIMENSION		
	A	B	C
IK2	0.36	0.708	1.66
IK4	0.95	1.303	2.25
IK6	1.15	1.697	2.65
IK8	1.35	2.095	3.05

NOTES (UNLESS OTHERWISE SPECIFIED):

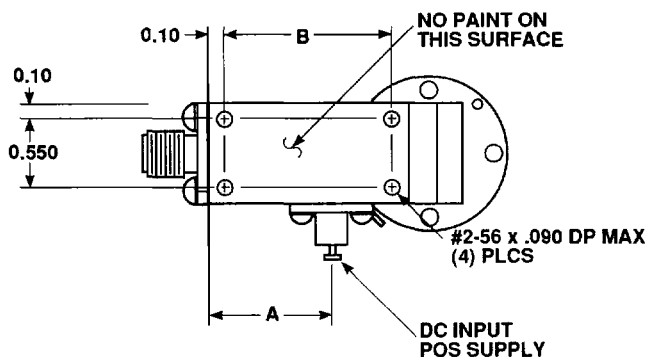
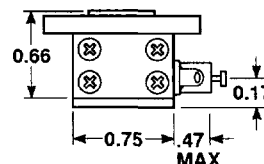
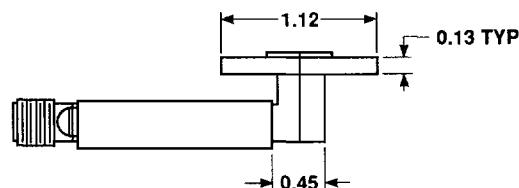
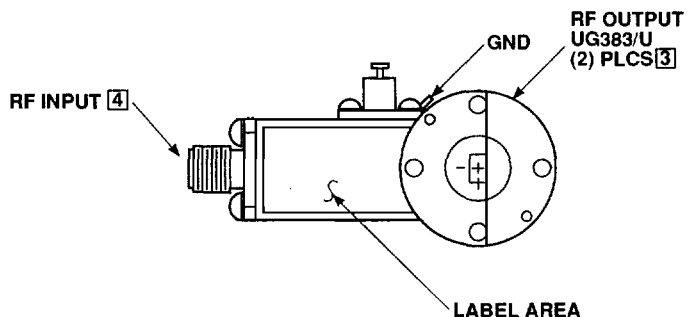
1. DIMENSIONS ARE SPECIFIED IN INCHES
2. TOLERANCES: .XX $\pm$.01

.XXX $\pm$.005

ALL TOLERANCES BEFORE PAINT AND/OR LABELING

- [3] RF INPUT/OUTPUT CONNECTOR:
3 MM SMA COMPATIBLE

Case Drawing
IK Series
Coax/WR-22



CASE	DIMENSION	
	A	B
IK2	0.36	0.708
IK4	0.95	1.303
IK6	1.15	1.697
IK8	1.35	2.095

NOTES (UNLESS OTHERWISE SPECIFIED):

1. DIMENSIONS ARE SPECIFIED IN INCHES

2. TOLERANCES: .XX ± .01

.XXX ± .005

ALL TOLERANCES BEFORE PAINT AND/OR LABELING

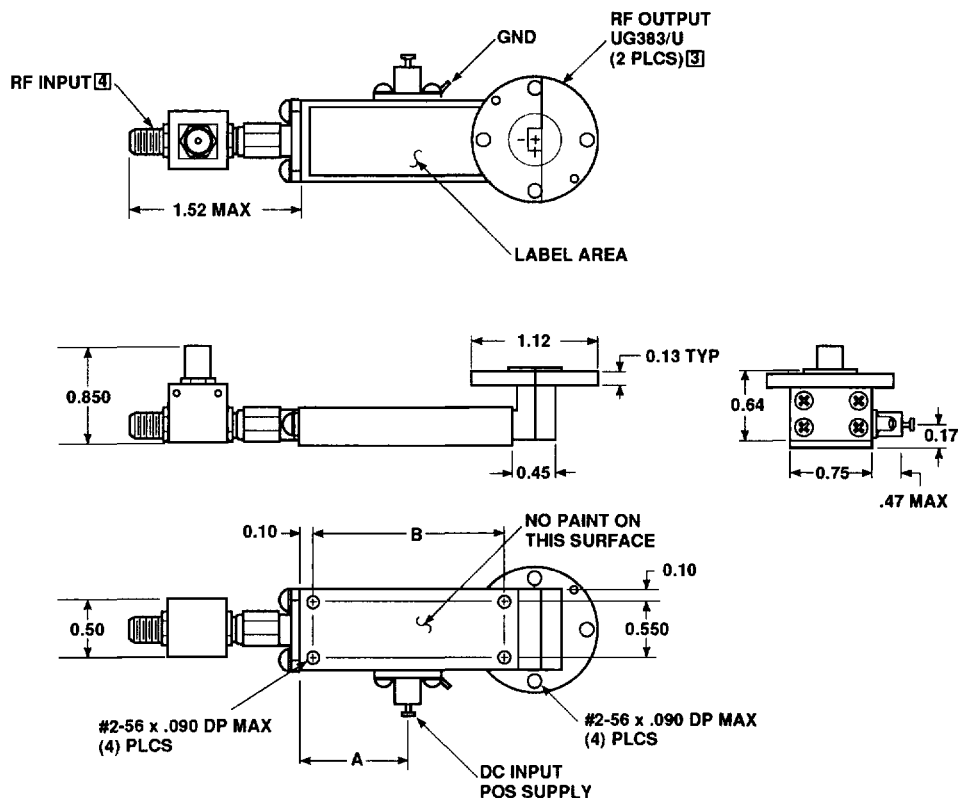
[3] OUTPUT CONNECTOR:

WR-22,UG 383/U

[4] RF INPUT CONNECTOR: 3MM SMA COMPATIBLE

**AMT Series:
Frequency Doublers and Quadruplers**

**Case Drawing
IK Series
Coax, Input Isolator/WR-22**

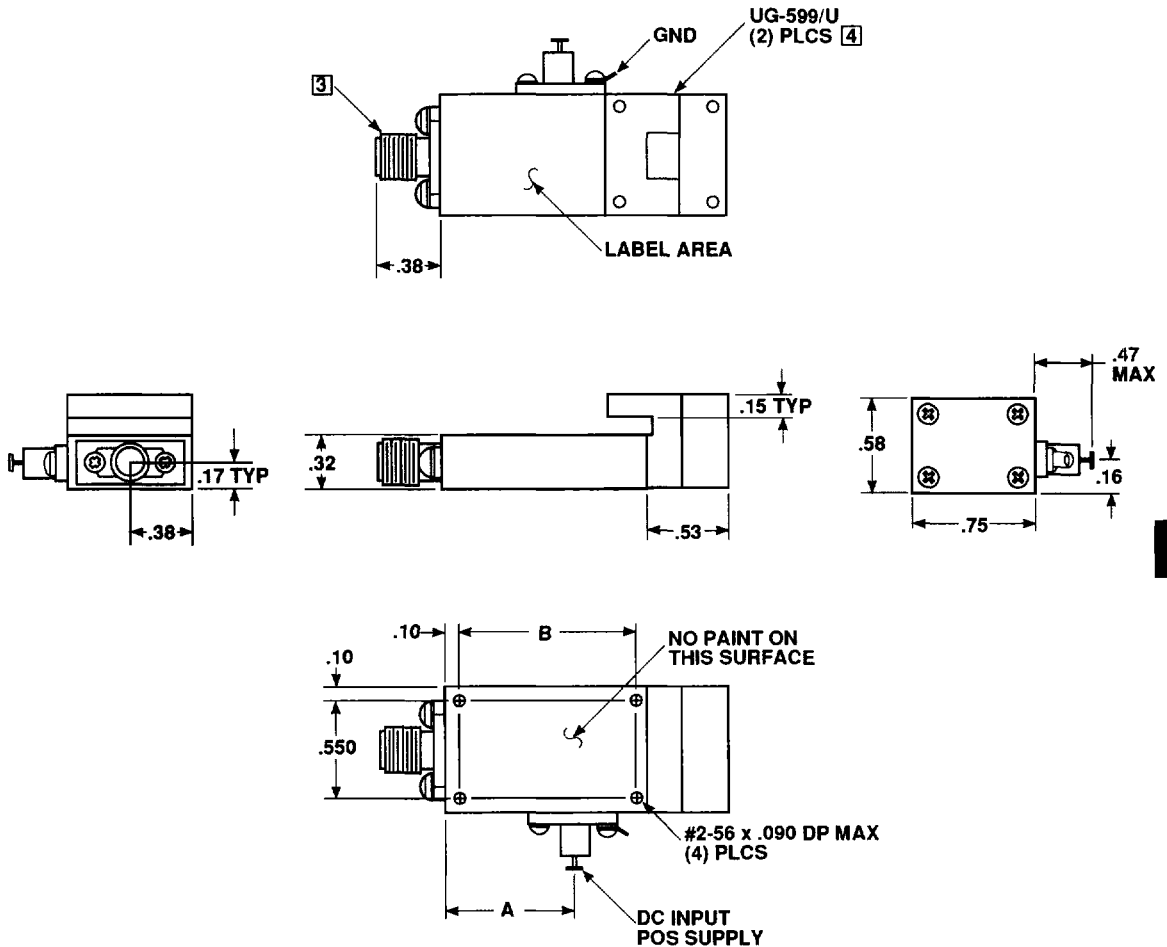


CASE	DIMENSION	
	A	B
IK2	0.36	0.708
IK4	0.95	1.303
IK6	1.15	1.697
IK8	1.35	2.095

NOTES (UNLESS OTHERWISE SPECIFIED):

1. DIMENSIONS ARE SPECIFIED IN INCHES
 2. TOLERANCES: .XX ± .01
.XXX ± .005
- ALL TOLERANCES BEFORE PAINT AND/OR LABELING
- (3) RF OUTPUT CONNECTOR:
WR-22, UG 383/U
- (4) RF INPUT CONNECTOR: 3MM SMA COMPATIBLE

Case Drawing
IK Series
Coax/WR-28



CASE	DIMENSION	
	A	B
IK2	0.36	0.708
IK4	0.95	1.303
IK6	1.15	1.697
IK8	1.35	2.095

NOTES (UNLESS OTHERWISE SPECIFIED):

1. DIMENSIONS ARE SPECIFIED IN INCHES
2. TOLERANCES: .XX $\pm$.01
.XXX $\pm$.005

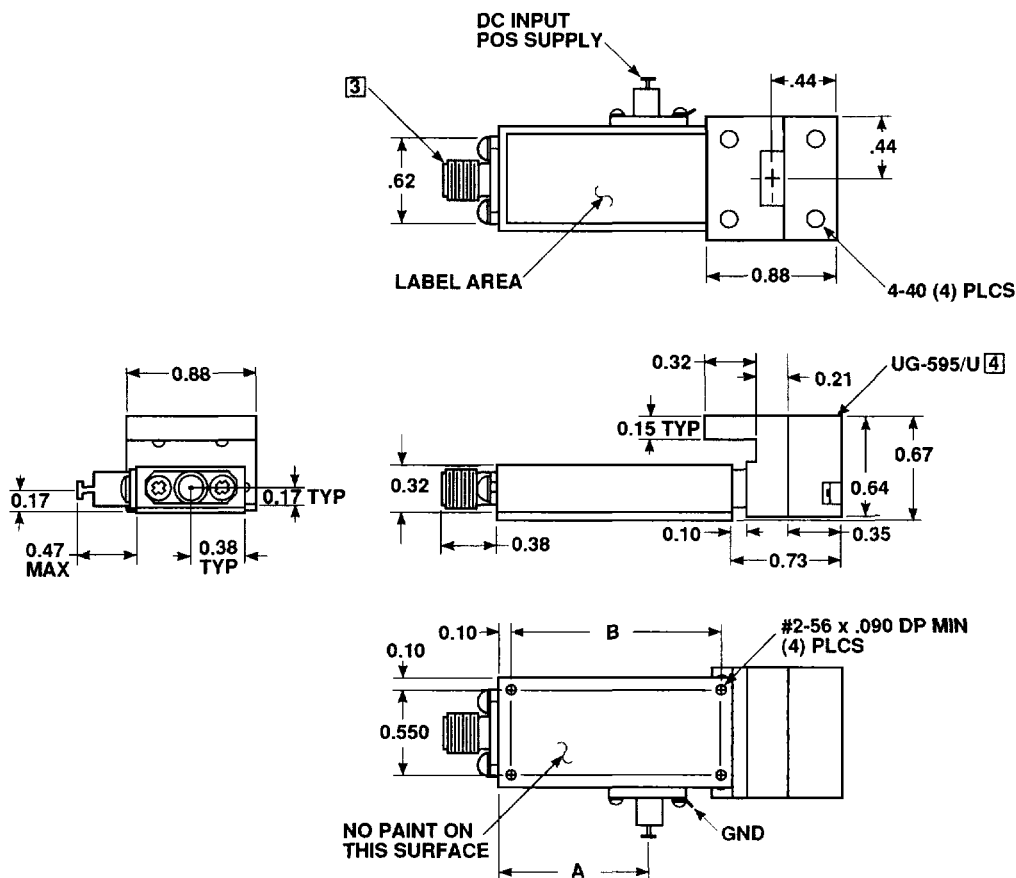
ALL TOLERANCES BEFORE PAINT AND/OR LABELING

3 RF INPUT CONNECTOR: 3 MM SMA COMPATIBLE

4 RF OUTPUT CONNECTOR: WR-28, UG-599/U

**AMT Series:
Frequency Doublers and Quadruplers**

**Case Drawing
IK Series
Coax/WR-42**



CASE	DIMENSION	
	A	B
IK2	0.36	0.708
IK4	0.95	1.303
IK6	1.15	1.697
IK8	1.35	2.095

NOTES (UNLESS OTHERWISE SPECIFIED):

1. DIMENSIONS ARE SPECIFIED IN INCHES

2. TOLERANCES: .XX ± .01

.XXX ± .005

ALL TOLERANCES BEFORE PAINT AND/OR LABELING

3 RF INPUT CONNECTOR: 3 MM SMA COMPATIBLE

4 RF OUTPUT CONNECTOR: WR-42, UG-595/U