HEWLETT® PACKARD

Avantek Products

Frequency Multipliers

Selection Guide

AMT Series

Features

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

Applications

- **Instrumentation**
- **Military and Commercial**
- **Communications**

Description

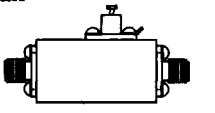
The AMT-260X2 and AMT-400X2 are active frequency doublers with outputs covering the full 18-26.5 GHz and 26.5-40 GHz bands respectively. Some models use post amplification for optimum size and power consumption and all have greater bandwidth capability if needed.

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.

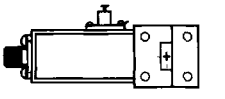
* Signal purity, the amount of rejection of all signals (fundamental, third harmonic, etc.) except for the desired output signal, is measured relative to the desired output signal in dBc.

Case Types

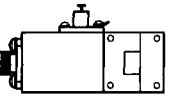
Coax



Coax/WR-42

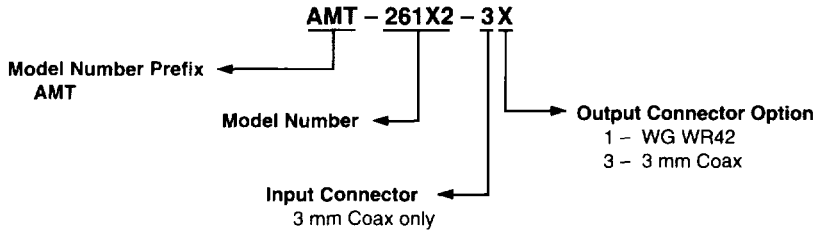


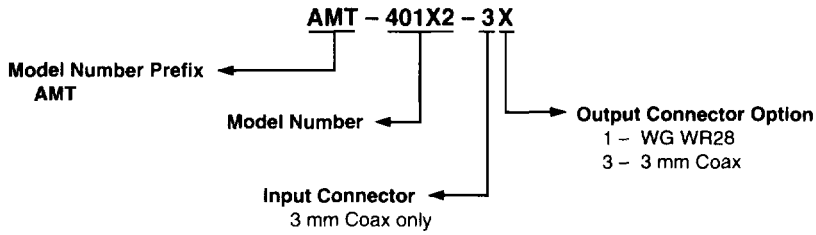
Coax/WR-28



(See Section 5 for detailed case drawings.)

Product Options





For more information on R-Series screening, see Reliability Screening, Section 6.

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AMT Series

Guaranteed Specifications @ 25°C Case Temperature

Model	Input Frequency (GHz)	Output Frequency (GHz)	RF Power Input (dBm) Minimum[1]	RF Power Output (dBm) Minimum	Signal Purity (dBc) Maximum	Voltage (VDC)	Input Power Current (mA) Maximum	Case Type
AMT-261X2-3X	9.0-13.25	18.0-26.5	+10	+21	-20	12	750	IQ8
AMT-401X2-3X	13.25-20.0	26.5-40.0	+10	+15	-20	12	350	IQ8

Notes: Maximum safe input power: +10 dBm

1. Recommended minimum input to achieve listed minimum power output.
2. Units contain internal voltage regulator and operate with +12 to +15 VDC.
3. For case drawings, see Section 5.