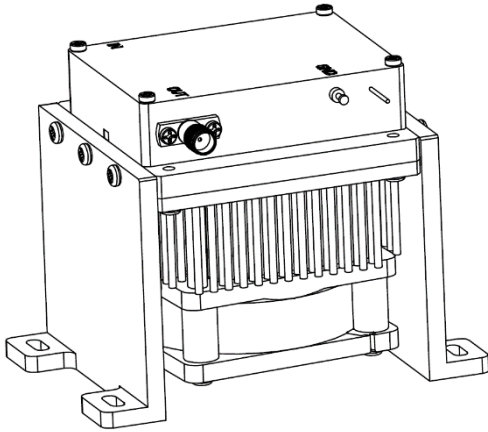


Active X2, 15-43GHz

2022-9-27

High Power Frequency Doubler, Pout=+28dBm



With -HF Option

Description:

AT-AM2-1543N-28T is a broadband frequency doubler. The doubler has an input frequency of 7.5-21.5 GHz with a typical output +28dBm from 15-43GHz.

The integrated output buffers deliver high output power at a low drive level. The doubler also has a typical harmonic suppression. The input port is SMA female, and the output is 2.92mm Female in default and 2.4mm is available according to request..

More information, please visit www.atmicrowave.com

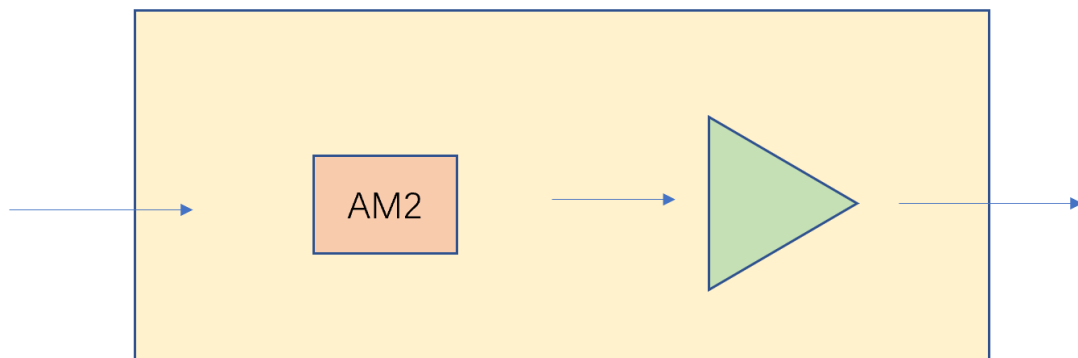
Feature

- ✓ Frequency: 15-43GHz
- ✓ Pout: +28dBm typical
- ✓ Input: 7.5-21.5GHz, +3dBm
- ✓ Low Harmonics

Application

- ✓ 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

Diagram Block





AT-AM2-1543N-28T

Active Multiplier x2, 15-43Hz Pout=+28dBm

Electronical Specifications:

| Parameter | Min | Typical | Max |
|------------------------------|-----|-------------|-------|
| Input Frequency | | 7.5-21.5GHz | |
| Input Power | +3 | +5dBm | +8dBm |
| Multiplier Factor | | X2 | |
| Output Frequency | | 15-43GHz | |
| Output Power | +27 | +28dBm | |
| X1/X3 Suppression vs X2 Pout | | -15dBc | |
| Drain Voltage | | +8 to 15V | +24V |
| Current @12V | | 0.7A | 1.1A |
| Spec Temp | | +25C | |

Mechanical Information

| Item | Description |
|---------------------------|---------------|
| Input Port | SMA Female |
| Output Port | 2.92mm Female |
| Case Material | Copper |
| Finish | Gold Plated |
| Weight (without heatsink) | 230g |
| Size: | See outline |

Absolute Maximum Ratings Table

| Parameter | Value |
|-----------------------|--------------|
| Drain Supply | +36V |
| RF Input Power | +15dBm |
| Operating Temperature | -40 to +85C |
| Storage Temperature | -55 to +125C |





AT-AM2-1543N-28T

Active Multiplier x2, 15-43Hz Pout=+28dBm

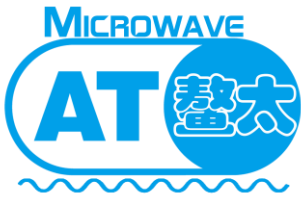
Part Number Selection

| Item | Description |
|---------------------|---|
| AT-AM2-1543N-28T | In defaulted without heatsink and Fan. Heatsink and Fan required during operation. |
| AT-AM2-1543N-28T-HF | Including Heatsink and Fan. Fan bias is connected with PA Module's Vdd supply |

Notes:

- ✓ Datasheet may be changed according to update of MMIC, Raw materials , process, and so on.
- ✓ This data is only for reference, not for guaranteed specifications.
- ✓ Please contact AT Microwave team to make sure you have the most current data.
- ✓ Always pay attention to the temperature of the case, heatsink and fan are required if case temperature exceeds over 50C.

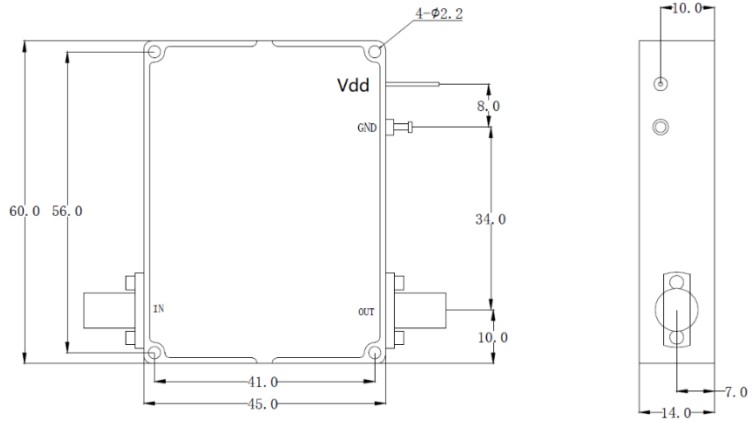




AT-AM2-1543N-28T

Active Multiplier x2, 15-43Hz Pout=+28dBm

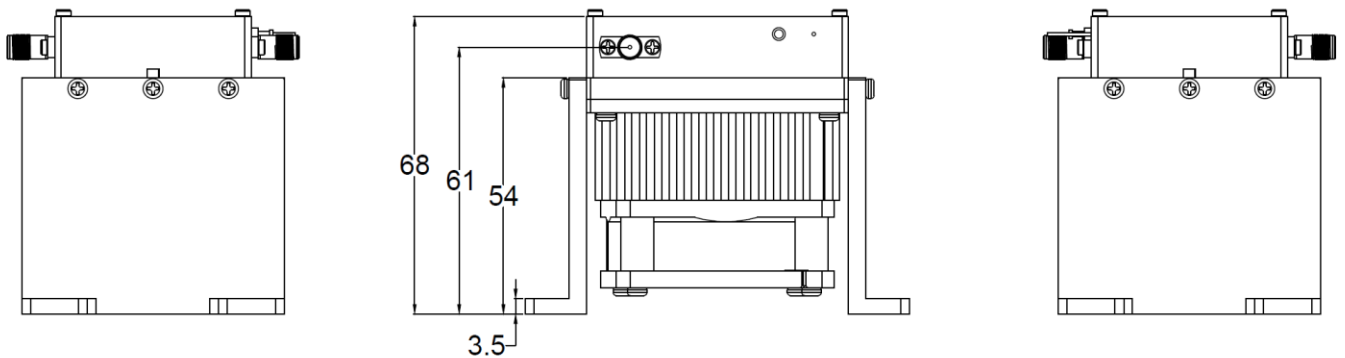
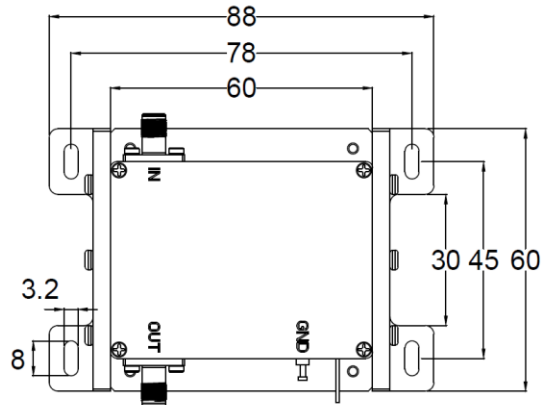
Dimension: (unit mm)



| | <26.5GHz | <40GHz | <50GHz | <67GHz |
|-------------|----------|--------|--------|--------|
| Connector | SMA | 2.92mm | 2.4mm | 1.85mm |
| Length of a | 9.4mm | 9.5mm | 10.8mm | 11.3mm |

Note: Female Default. Contact with us for other types.

Outline without heatsink. Heat Sink Required During Operation



Outline-HF option with heatsink

