



# AT-AM3-3050T-20XC

Active Multiplier x3, 30-50GHz Pout=+20dBm

## Active X3, 30-50GHz Broadband, High Power Pout=+20dBm, 2.4mm



### Description:

AT-AM3-3050T-20XC is a broadband X3 frequency multiplier. The multiplier has an input frequency of 10-17 GHz with a typical output +20dBm from 30-50GHz.

The integrated input and output buffers deliver high output power at a low drive level. The multiplier also has a typical harmonic suppression. The input port is SMA female, and the output is 2.4mm Female. Other port configurations are available under different requirement.

More information, please visit [www.atmicrowave.com](http://www.atmicrowave.com)

### Feature

- ✓ Frequency: 30-50GHz
- ✓ Pout: +20dBm typical
- ✓ Input: 10-17GHz
- ✓ Low Harmonics

### Application

- ✓ 28/39GHz 5G Communication
- ✓ Test Equipment
- ✓ ROF (RF Over Fiber)
- ✓ Radar System

### Electronical Specifications:

| Parameter                  | Min    | Typical | Max   |
|----------------------------|--------|---------|-------|
| Input Frequency            | 10GHz  |         | 25GHz |
| Input Power                | +2     | +5dBm   | +8dBm |
| Multiplier Factor          |        | X3      |       |
| Output Frequency           | 30GHz  |         | 50GHz |
| Output Power               | +18dBm | +20dBm  |       |
| X1/X2 Harmonic Suppression |        | -20dBc  |       |
| Drain Voltage              |        | +5V     | +8V   |
| Current                    |        | 500mA   | 800mA |
| Spec Temp                  |        | 25C     |       |





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## Mechanical Information

| Item                      | Description  |
|---------------------------|--------------|
| Input Port                | SMA Female   |
| Output Port               | 2.4mm Female |
| Case Material             | Copper       |
| Finish                    | Gold Plated  |
| Weight (Without Heatsink) | 80g          |
| Size:                     | See outline  |

## Absolute Maximum Ratings Table

| Parameter             | Value        |
|-----------------------|--------------|
| Drain Supply          | +13V         |
| RF Input Power        | +15dBm       |
| Operating Temperature | -40 to +85C  |
| Storage Temperature   | -55 to +125C |

### 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.

## Part Number Selection Guide

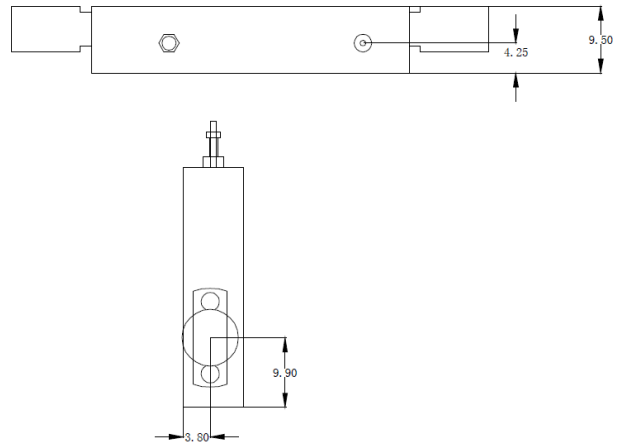
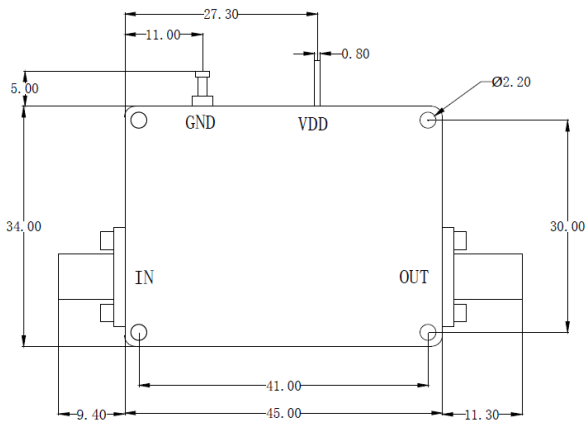
| Item           | Description   |
|----------------|---|
| PN             | Stand Module with DC Power Supply   |
| <b>PN-LCBT</b> | <b>L</b> ow Cost, <b>C</b> ompact <b>B</b> ench- <b>T</b> op, +220V Supply with AC/DC Adapter |



### Test Data (25C)

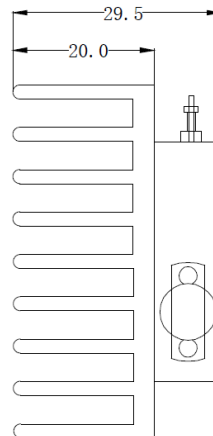
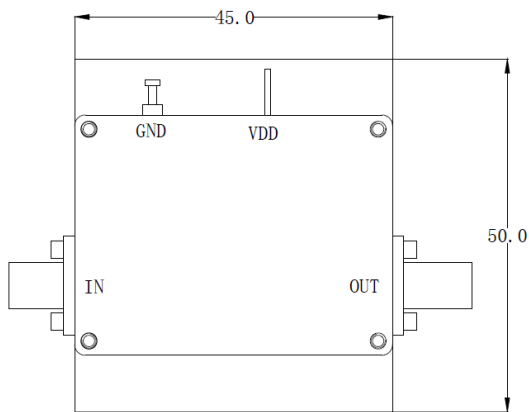
Please note that test curves will vary slightly from unit to unit.

### Dimension: (Unit:mm)



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

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



Including a small heatsink without Fan if output Power higher than +20dBm.  
Customers can removed it or use their own heatsink according to actual situation.

Heat Sink Required During Operation if case Temp higher than 50C

