



AT-AM2-1840-12XC

Active Multiplier x2, 18-40GHz Pout=+12dBm

Active X2, 18-40GHz Frequency Doubler

2022-7-1



Description:

AT-AM2-1840-12XC is a broadband frequency doubler. The doubler has an input frequency of 9-22 GHz with a typical output +12dBm from 18-40GHz.

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 Male in default and 2.4mm Male is available according to request..

More information, please visit www.atmicrowave.com

Feature

- ✓ Frequency: 18-40GHz
- ✓ Pout: +12dBm typical
- ✓ Input: 9-20GHz
- ✓ Low Harmonics

Application

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

Electronical Specifications:

Parameter	Min	Typical	Max
Input Frequency		9-20GHz	
Input Power	+10	+13dBm	+15
Multiplier Factor		X2	
Output Frequency		18-40GHz	
Output Power	+10	12dBm	
1 st Harmonic Suppression	-20dBc	-30dBc	
3 rd Harmonic Suppression	-30dBc	-40dBc	
4 th Harmonics Suppression		-10dBc	
Drain Voltage		+5	+8V
Current		90mA	
Spec Temp		+25C	





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Mechanical Information

Item	Description
Input Port	SMA Female
Output Port	2.92mm Male
Case Material	Copper
Finish	Gold Plated
Weight (Without Heatsink)	80g
Size:	30x30x14mm

Absolute Maximum Ratings Table

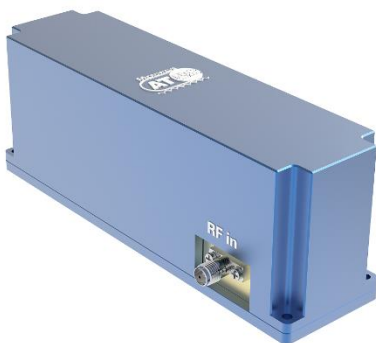
Parameter	Value
Drain Supply	+13V
RF Input Power	+23dBm
Operating Temperature	-40 to +55C
Storage Temperature	-55 to +125C

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
PN-LCBT	L ow Cost, C ompact B ench- T op, +220V Supply with AC/DC Adapter



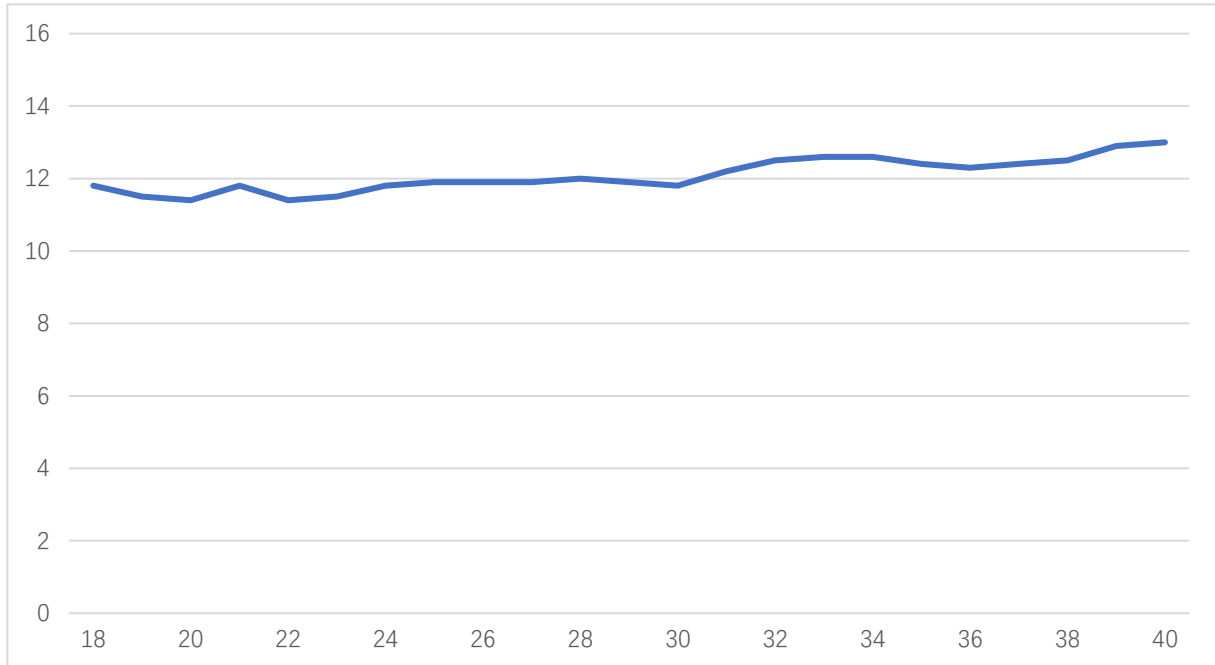


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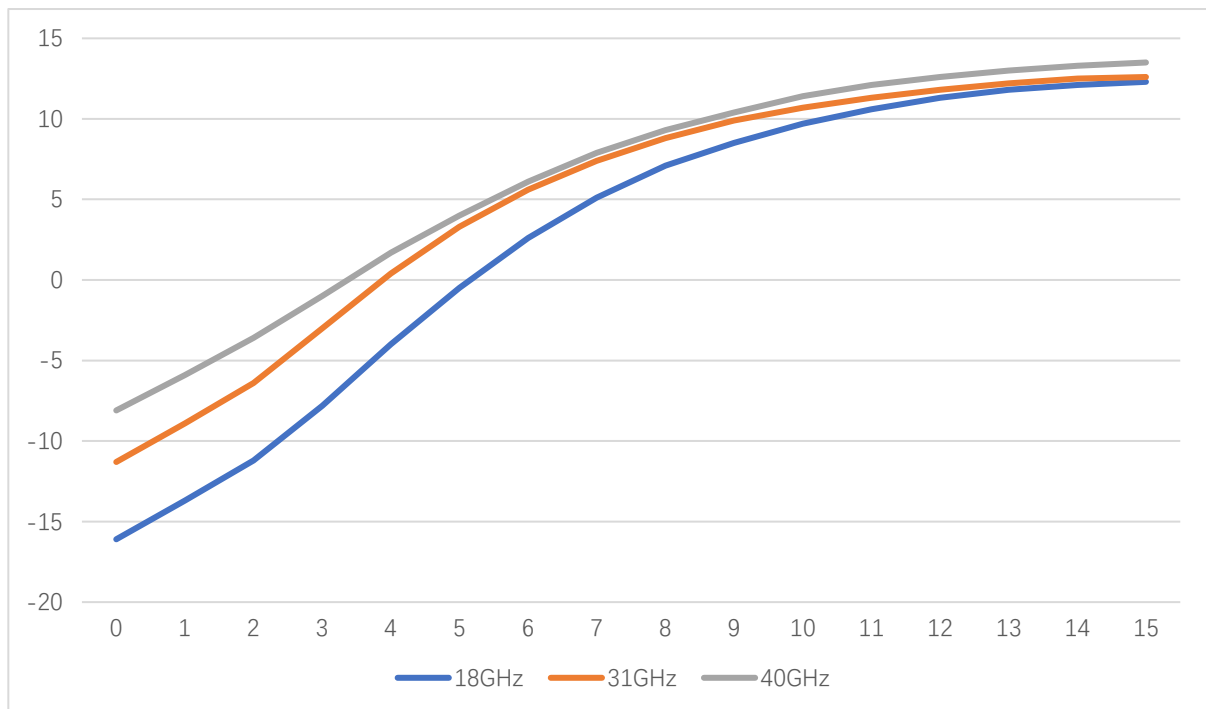
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Test Data (25C)

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



Pout vs Frequency



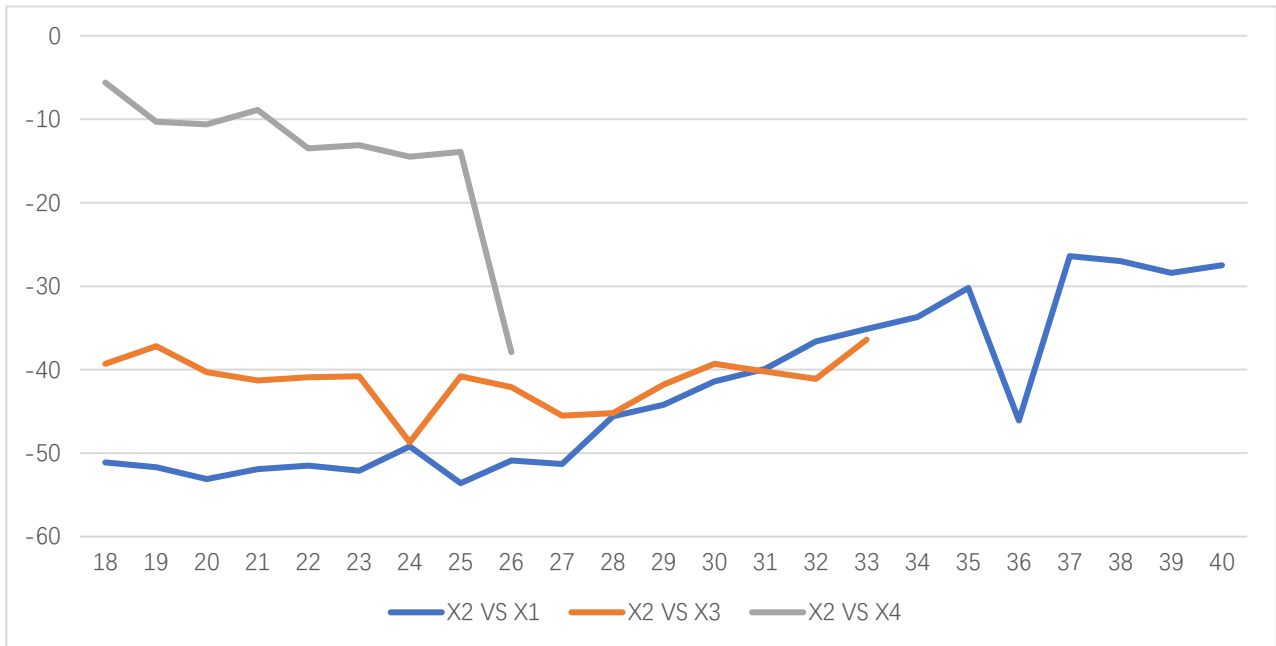
Pout vs Pin at 18/31/40GHz





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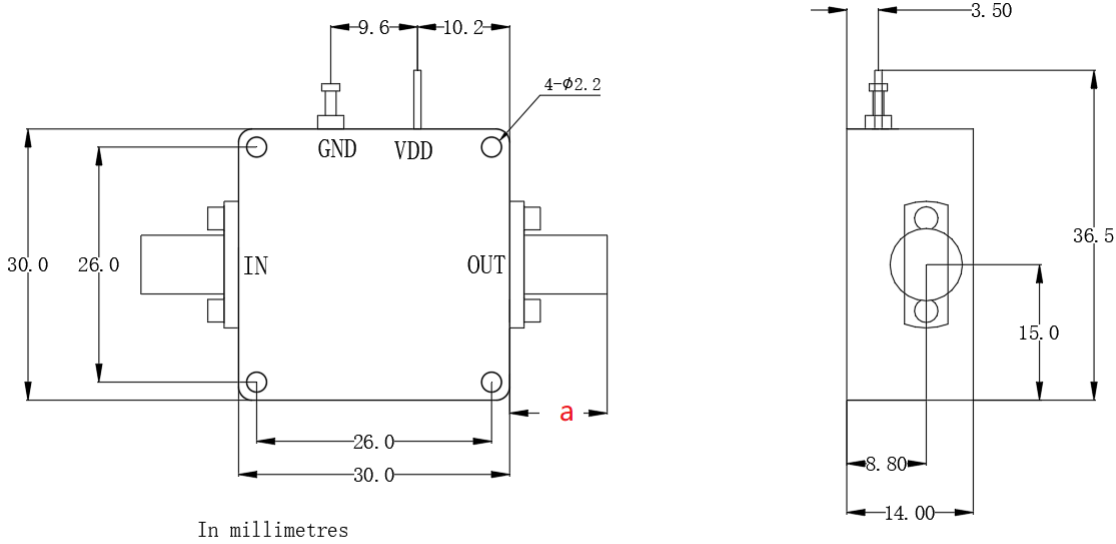
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X1/X3/X4 Harmonics Suppression vs X2 Pout



Dimension:



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

