

AMPLIFIER/DOUBLER/AMPLIFIER

ADA-1020



Features

- Input 10.0 to 20.0 GHz
- Output 20.0 to 40.0 GHz
- +20 dBm Typical Output Power

NOTE: ADA-1020 is approaching EOL. [Please see this letter for LTB and recommended part information.](#)

Electrical Specifications - Specifications guaranteed from -30 to +70°C, measured in a 50-Ohm system.

Parameter	INPUT (GHz)	OUTPUT (GHz)	Min	Typ	Max
Input (dBm) F(in)	10.0-20.0		+5		+10
Output Converted Power (dBm) 2F(out)		20.0-40.0	+15	+20	
Suppressions (dBc) F(in) Fundamental 3F(out) Third Harmonic		10.0-20.0 30.0-40.0		See Plots	
Bias Requirements (mA) ¹ +5 Volts DC -5 Volts DC				400 5	500 20

¹It is required that the negative bias be applied before or concurrent with the positive bias. A heat sink is required.

Part Number Options

Please specify package style by adding to model number.	
Package Style(s)	Example
CM , CMM , CMV , CMMV	ADA-1020 CM

Marki Microwave reserves the right to make changes to the product(s) or information contained herein without notice. Marki Microwave makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Marki Microwave assume any liability whatsoever arising out of the use of or application of any product.

AMPLIFIER/DOUBLER/AMPLIFIER

Page 2

ADA-1020

Input 10.0 to 20.0 GHz
Output 20.0 to 40.0 GHz

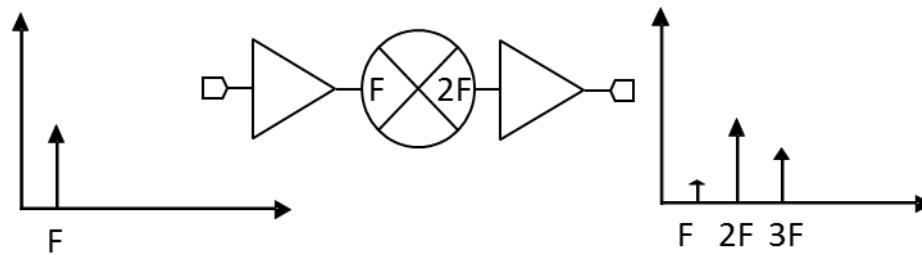
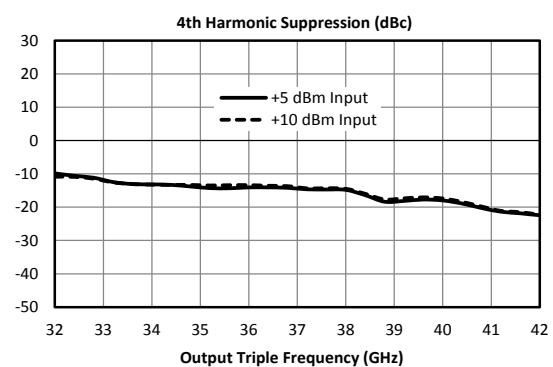
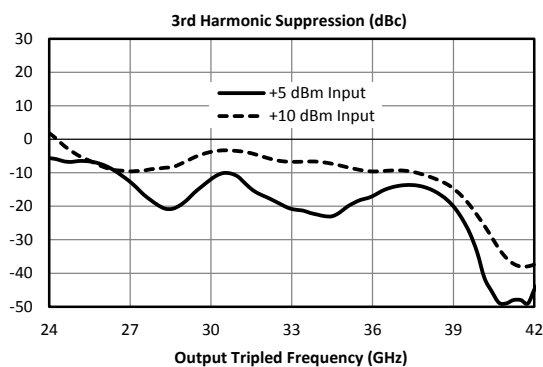
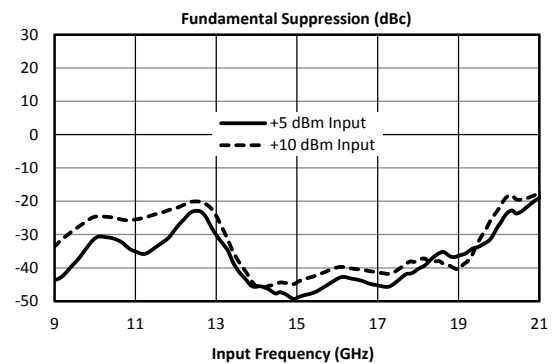
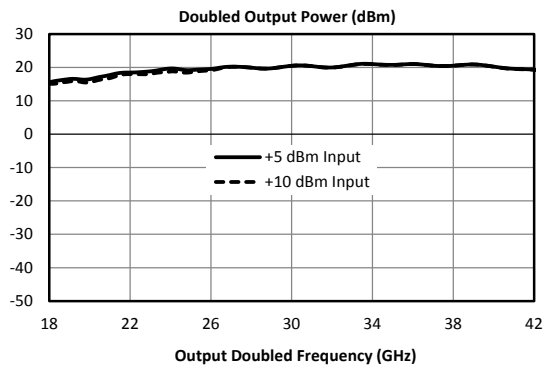


Figure 1. Schematic.

Typical Performance





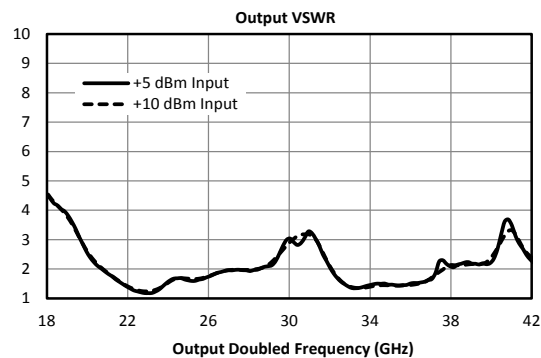
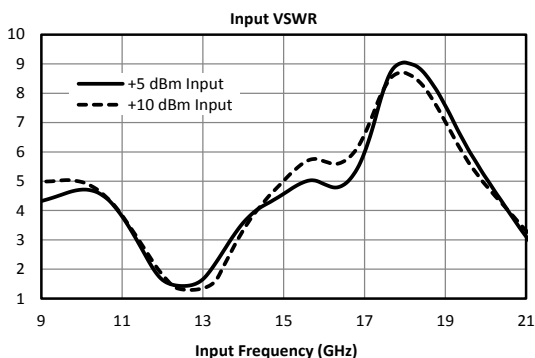
AMPLIFIER/DOUBLER/AMPLIFIER

Page 3

ADA-1020

Input 10.0 to 20.0 GHz
Output 20.0 to 40.0 GHz

Typical Performance (cont)



DATA SHEET NOTES:

1. Maximum input power without damage is +16 dBm at +70°C.
2. A heat sink is required for sustained operation.
3. Specifications are subject to change without notice. Contact Marki Microwave for the most recent specifications and data sheets.

Marki Microwave reserves the right to make changes to the product(s) or information contained herein without notice. Marki Microwave makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does Marki Microwave assume any liability whatsoever arising out of the use or application of any product.

© Marki Microwave, Inc.



215 Vineyard Court, Morgan Hill, CA 95037 | Ph: 408.778.4200 | Fax: 408.778.4300 | info@markimicrowave.com

www.markimicrowave.com