



AMPLIFIER/DOUBLER/AMPLIFIER

ADA-2050



Features

- Input 10.0 to 25.0 GHz
- Output 20.0 to 50.0 GHz
- +20 dBm Typical Output Power to 40 GHz
- 35 dBc Typical Fundamental Suppression
- 20 dBc Typical 3rd Harmonic Suppression

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)	10.0-25.0		+8		+12
Output Converted Power (dBm) 2F(out)		20.0-40.0	+15	+20	
2F(out)		40.0-50.0	+8	+17	
Suppressions (dBc) F(in) Fundamental 3F(out) Third Harmonic 4F(out) Fourth Harmonic		10.0-25.0 30.0-50.0 40.0-50.0		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
CMV , CMMV	ADA-2050 CMV

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Input 10.0 to 25.0 GHz
Output 20.0 to 50.0 GHz

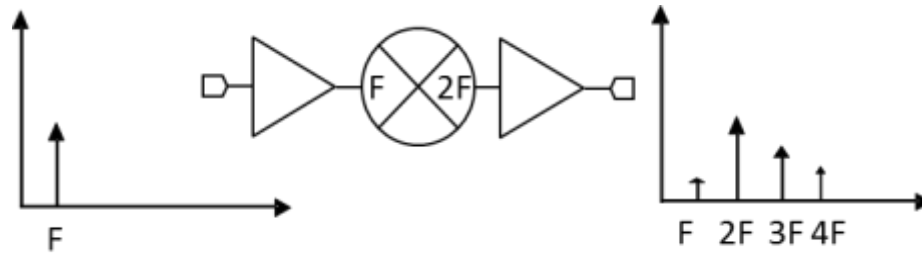
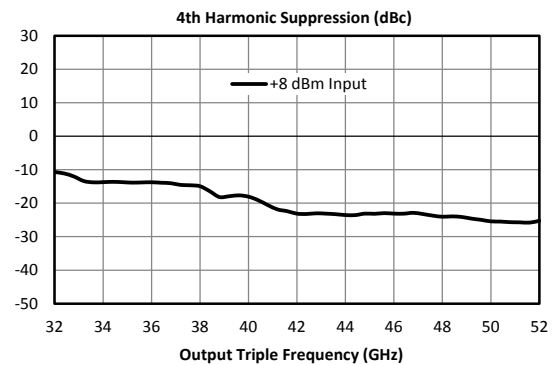
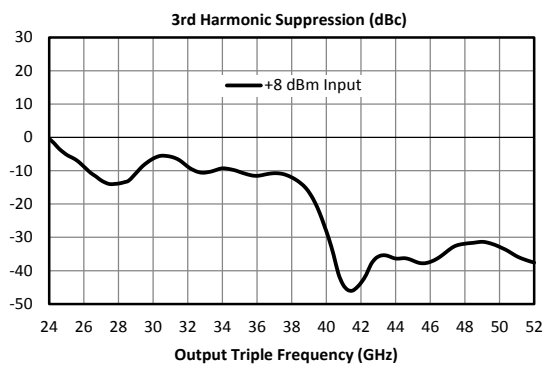
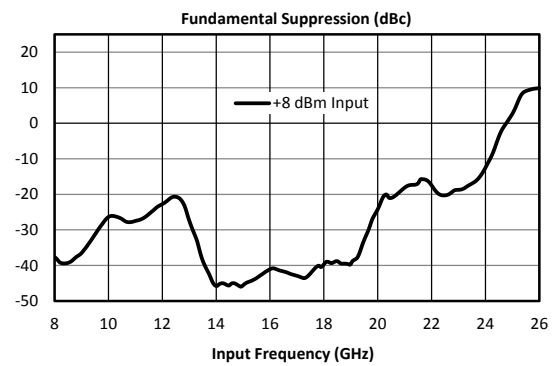
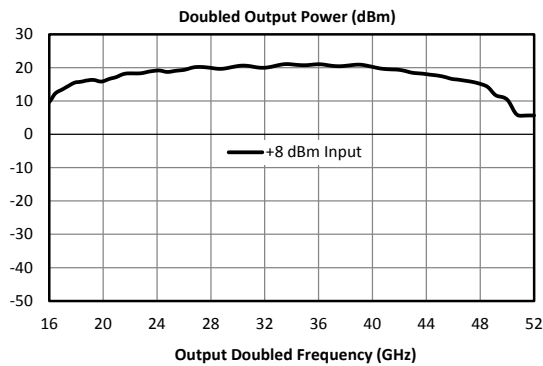


Figure 1. Schematic.

Typical Performance





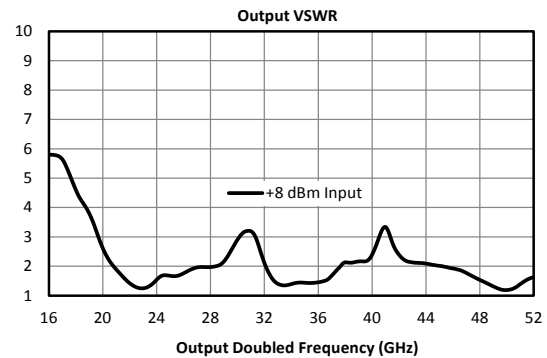
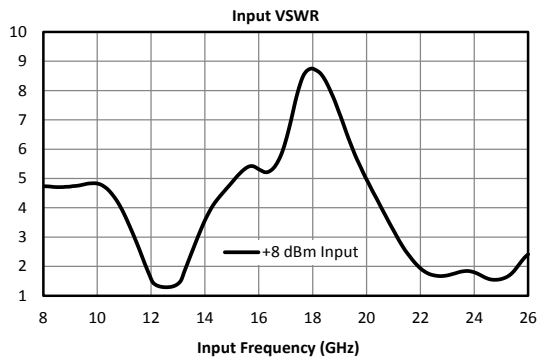
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Input 10.0 to 25.0 GHz
Output 20.0 to 50.0 GHz

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.

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