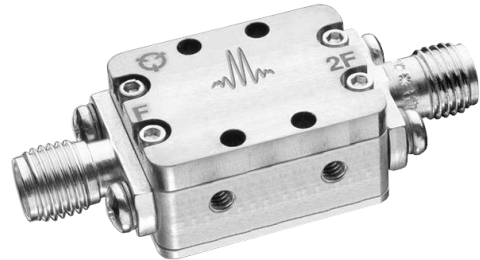


FREQUENCY DOUBLERS

D-1505

Features

- Input 1.5 to 5.0 GHz
- Output 3.0 to 10.0 GHz
- 10 dB Typical Conversion Loss
- 30 dBc Typical Third Harmonic Suppression
- Two Input Levels Available
- Multi-Octave Band Input



Electrical Specifications - Specifications guaranteed from -55 to +100°C, measured in a 50-Ohm system

Parameter	INPUT (GHz)	OUTPUT (GHz)	Min	Typ	Max	Diode Option LO drive level (dBm)
Conversion Loss (dB) F(in) 2F(out)	1.5-5.0	3.0-10.0		10.0	12.0	
Suppressions (dBc) F(in) Fundamental 3F(out) Third Harmonic		1.5-5.0 4.5-10.0	15 20	25 30		
Input Level (dBm) (Consult Marki Microwave for Higher Input Levels)						L (+10 to +13) M (+13 to +16)

Part Number Options

Please specify diode level and package style by adding to model number.					
Package Options		Examples			
Microstrip ^{1,2}	E	<u>D-1505</u>	<u>L</u>	<u>E</u>	<u>-2</u>
Connectorized	P	(Model)	(Diode Option)	(Package)	(I-Port Configuration)

¹Connectorized test fixtures available for most microstrip packages. Consult factory.

²E packages are offered in support of designed in projects only. For new designs consult the [MLD-0416SM](#).



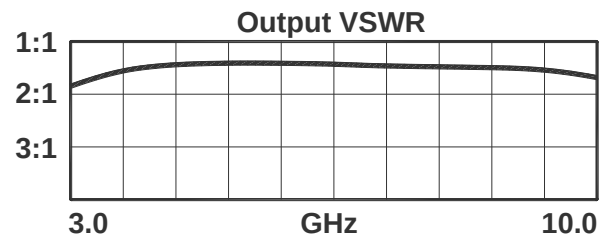
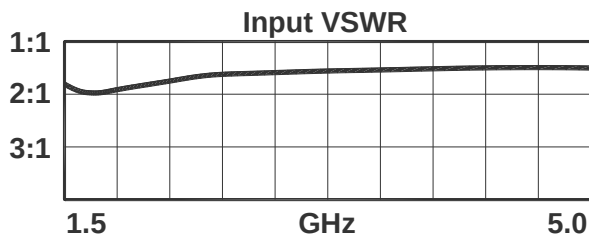
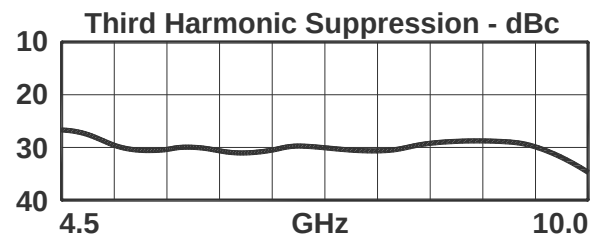
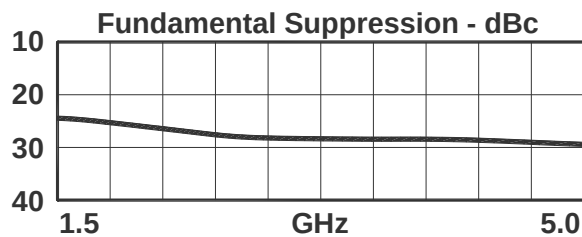
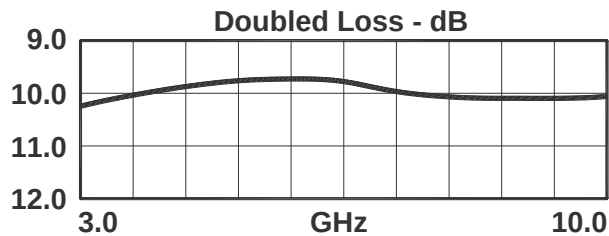
FREQUENCY DOUBLERS

Page 2

D-1505

**Input 1.5 to 5.0 GHz
Output 3.0 to 10.0 GHz**

Typical Performance



DATA SHEET NOTES:

1. Doubled Loss typically degrades less than 0.5 dB at +100°C and improves less than 0.5 dB at -55°C.
2. Maximum input power is +23 dBm at +25°C, derated linearly to +20 dBm at +100°C.
3. Specifications are subject to change without notice. Contact Marki Microwave for the most recent specifications and data sheets.
4. Standard configuration for A, B, and C outlines are with connectors and bottom spacer.
5. Catalog doubler circuits are continually improved. Configuration control requires custom model numbers and specifications.

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.

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