

## FREQUENCY DOUBLERS

**D-0308** 



#### **Features**

- Input 3.0 to 8.0 GHz
- Output 6.0 to 16.0 GHz
- 9.0 dB Typical Conversion Loss
- 30 dBc Typical 3rd 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	Тур	Max	Diode Option LO drive level (dBm)
Conversion Loss (dB)						
F(in)	3.0-8.0			9.0	12.0	
2F(out)		6.0-16.0				
Suppressions (dBc)						
F(in) Fundamental		3.0-8.0	15	25		
3F(out) Third Harmonic		9.0-16.0	20	30		
Input Level (dBm)						L (+10 to +13)
(Consult Marki Microwave for Higher Input Levels)						M (+13 to +16)

### **Part Number Options**

Please specify diode level and package style by adding to model number.								
Package Styles		Examples						
Connectorized	<u>A</u>	D-0308LA, D-0308LEZ						
Microstrip <sup>1</sup>	<u>E</u>	<u>D-0308</u>	<u>L</u>	<u>EZ</u>				
Surface Mount <sup>1</sup>	<u>EZ</u>	(Model)	(Diode Option)	(Package)				

<sup>&</sup>lt;sup>1</sup>Connectorized test fixtures available for most microstrip and surface mount packages. Consult factory.

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# **FREQUENCY DOUBLERS**

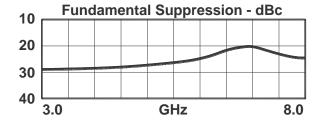
D-0308

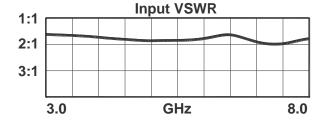
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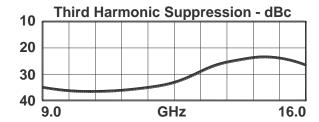
Input 3.0 to 8.0 GHz Output 6.0 to 16.0 GHz

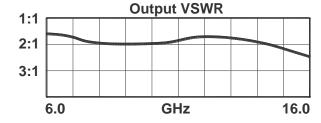
Typical Performance











#### 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.

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