



FREQUENCY DOUBLERS

D-0510



Features

- Input 5.0 to 10.0 GHz
- Output 10.0 to 20.0 GHz
- 9.5 dB Typical Conversion Loss
- 25 dBc Typical 3rd Harmonic Suppression
- Two Input Levels Available
- 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)	5.0-10.0	10.0-20.0		9.5	12.0	
Suppressions (dBc) F(in) Fundamental 3F(out) Third Harmonic		5.0-10.0 15.0-20.0	15 20	20 25		
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 Styles		Examples			
Connectorized	<u>A</u>	D-0510LA, D-0510LEZ			
Microstrip ¹	<u>E</u>	<u>D-0510</u>	<u>L</u>	<u>EZ</u>	
Surface Mount ¹	<u>EZ</u>	(Model)	(Diode Option)	(Package)	

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

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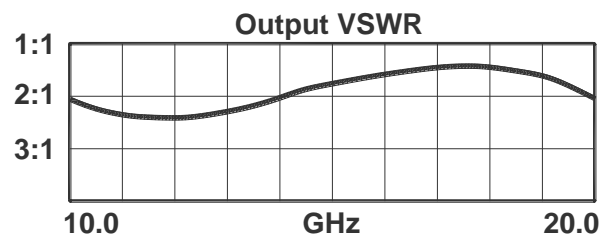
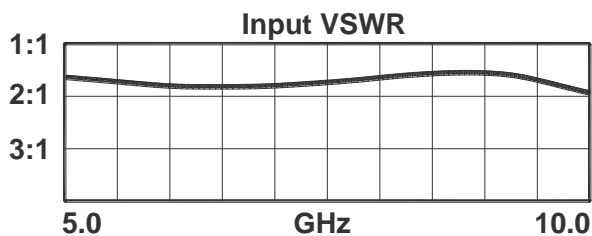
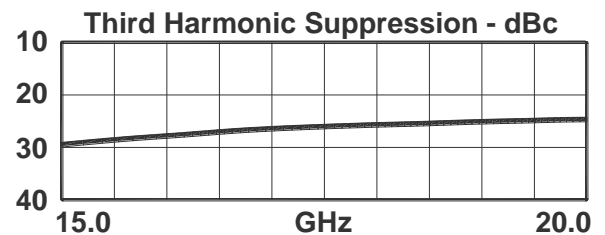
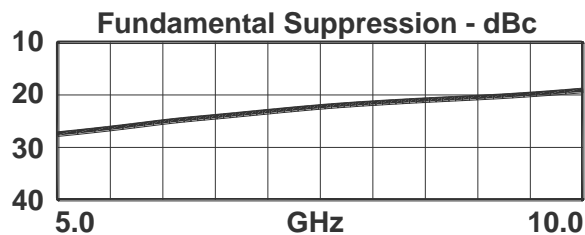
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Output 10.0 to 20.0 GHz

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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