

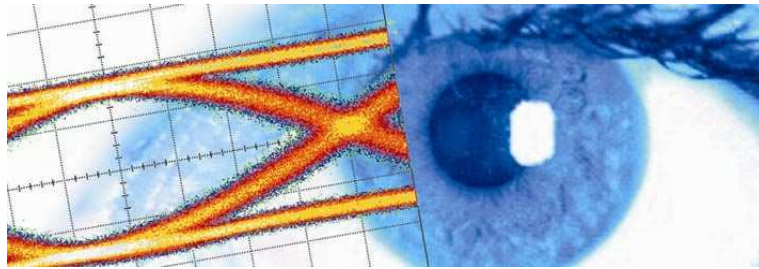


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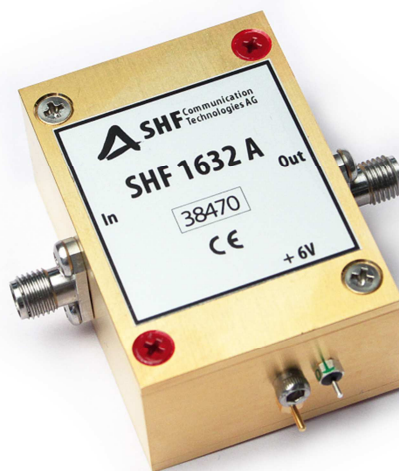
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Datasheet

SHF 1632 A

Frequency Doubler





Description

The SHF 1632 A is a frequency doubler. When driven by a 0 dBm input signal, the multiplier provides +2 dBm typical output power from 27 to 36 GHz. A built-in filter ensures appropriate suppression of the fundamental frequency.

Features

- Low Input Power Drive: 0 dBm
- Fundamental Suppression: >30 dBc
- Single Supply: +6V @ 495 mA



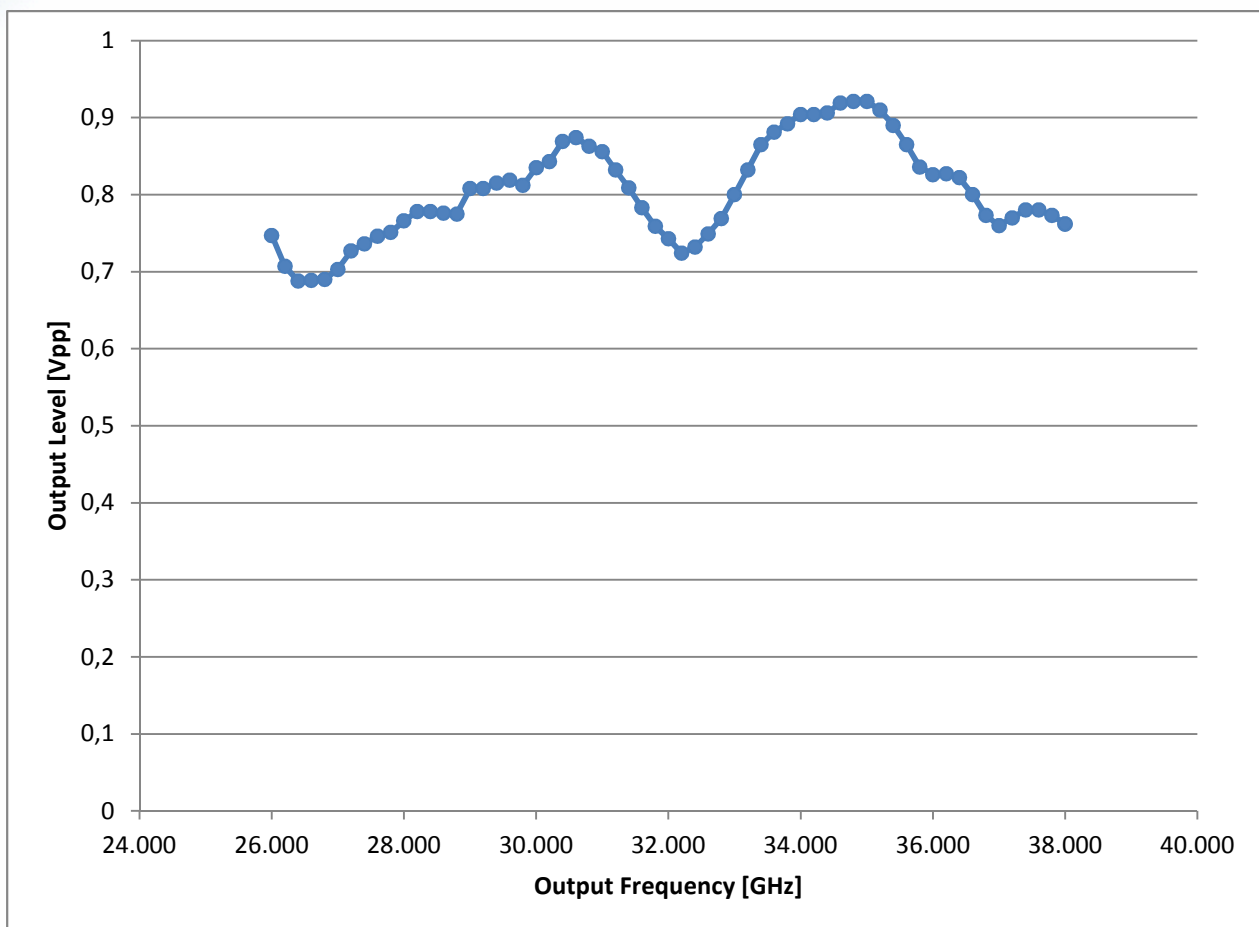
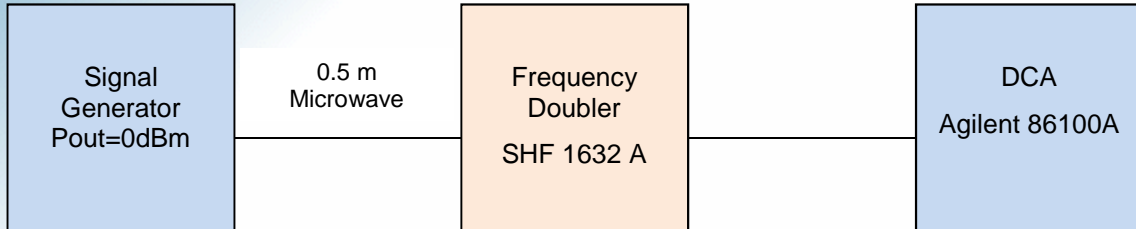
Specifications – SHF 1632 A

Parameter	Unit	Symbol	Min.	Typ.	Max.	Comment
Input						
Input Frequency	GHz	f_{in}	13.5		18	
Input Power Level	dBm	P_{in}	-2	0	4	
Input Return Loss	dB		8			
Output						
Output Frequency	GHz	f_{out}	27		36	
Output Power Level	dBm	P_{in}	-2	0	4	
Suppression of Fundamental	dBc		30			
Power						
Supply Voltage	V		6		9	
Supply Current	mA			495		
Power Consumption	W			3		@ 6V Supply Voltage
Mechanical Parameters						
Input/Output Connectors						2.92 mm (K) female
Dimensions	mm					50 x 35 x 22



Typical Signal Output Amplitude

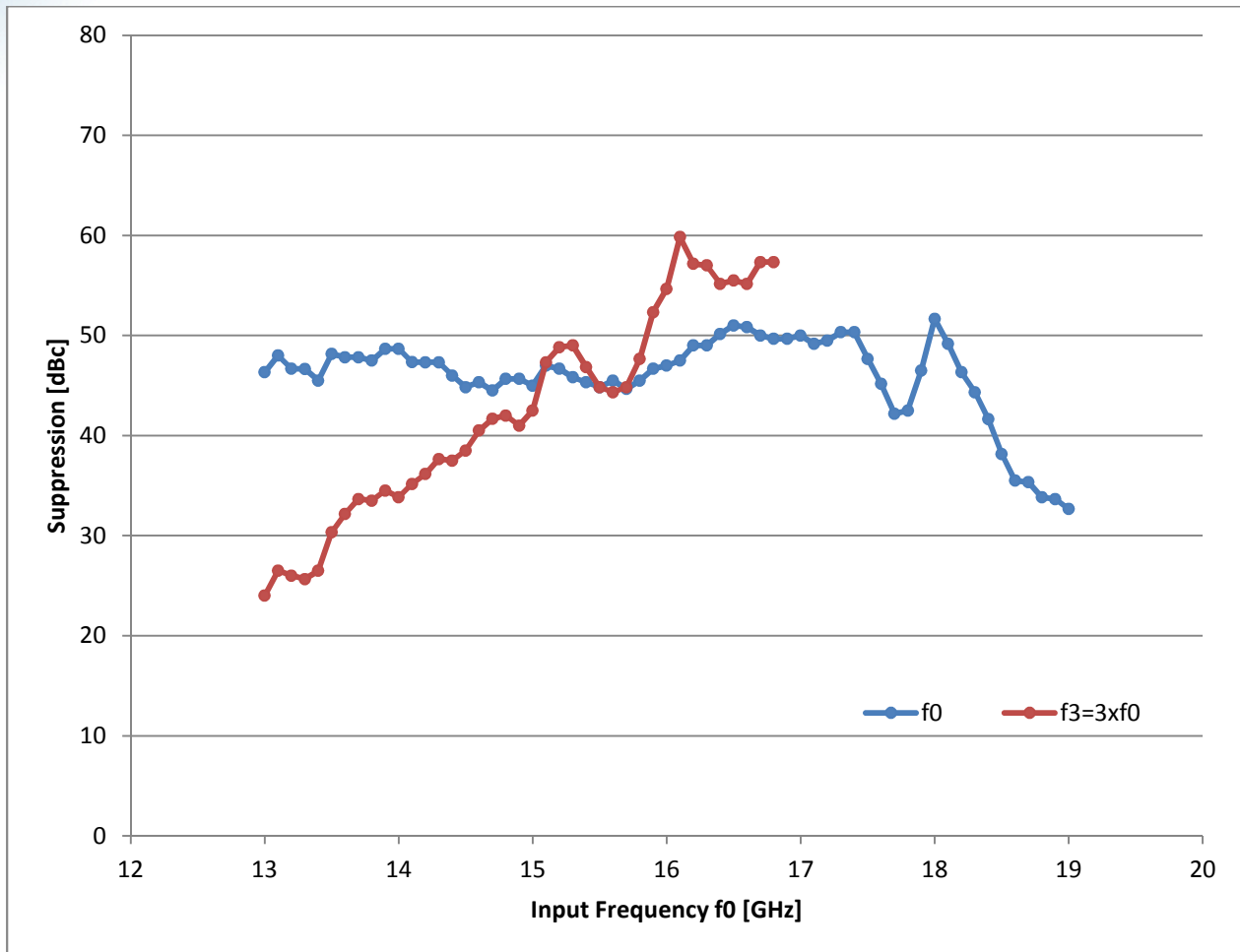
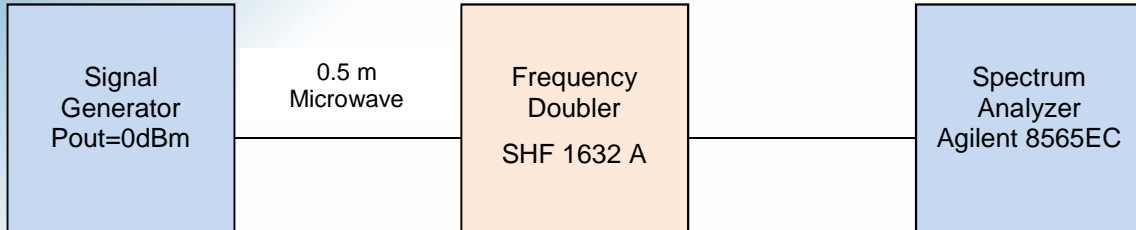
The measurements below have been performed using an Agilent DCA (86100A) with a 70 GHz-Module (86118A) and a Precision Timebase Module (86107A).





Typical Suppression of Fundamental & Harmonic Signal

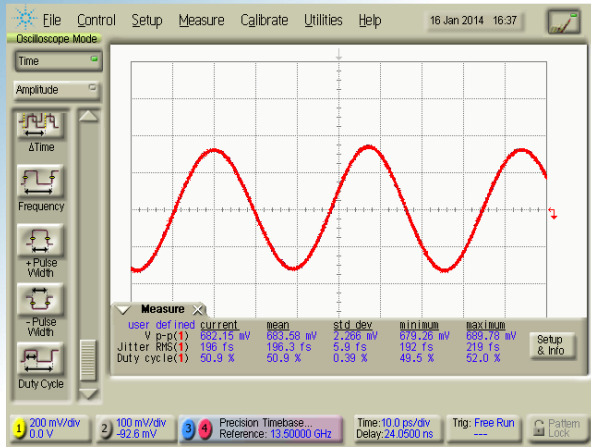
The measurements below have been performed using a Anritsu 68197C Signal Generator with a 0,5m Totoku cable assembly and an Agilent 8565 EC Spectrum Analyzer.



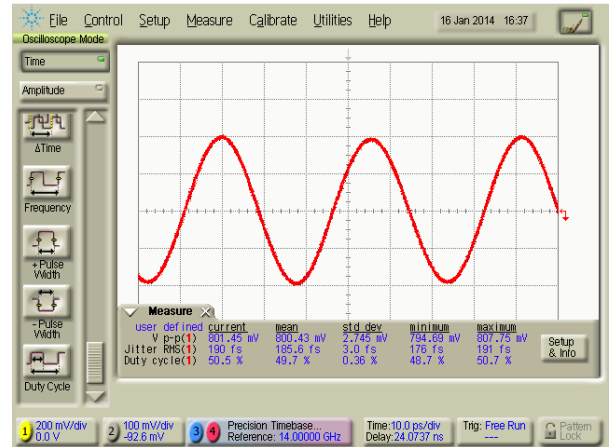


Typical Output Waveforms

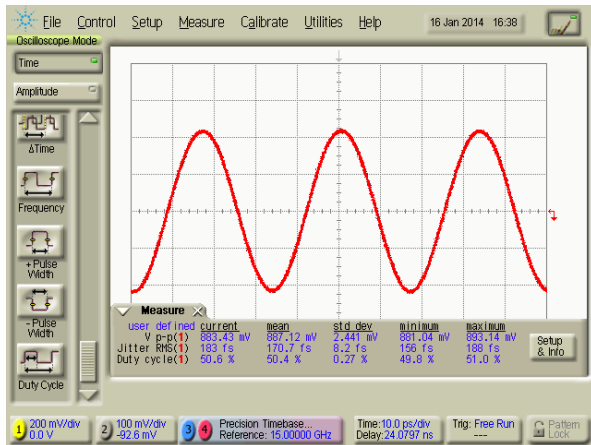
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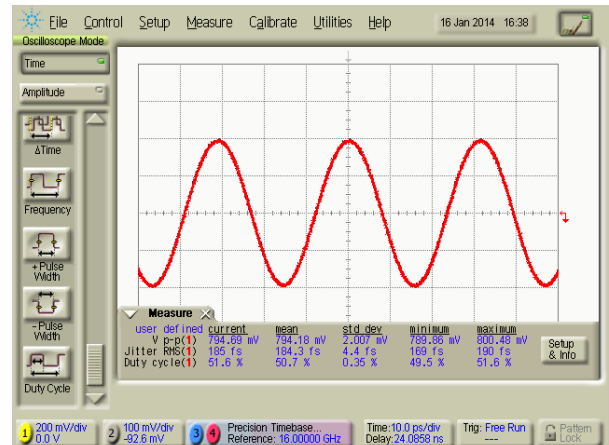
Output signal @ fin = 13.5 GHz



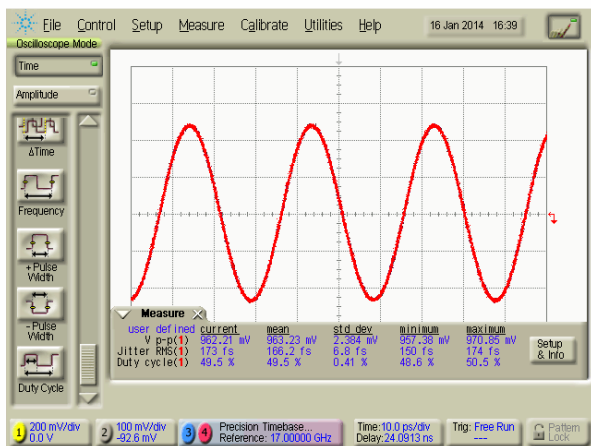
Output signal @ fin = 14 GHz



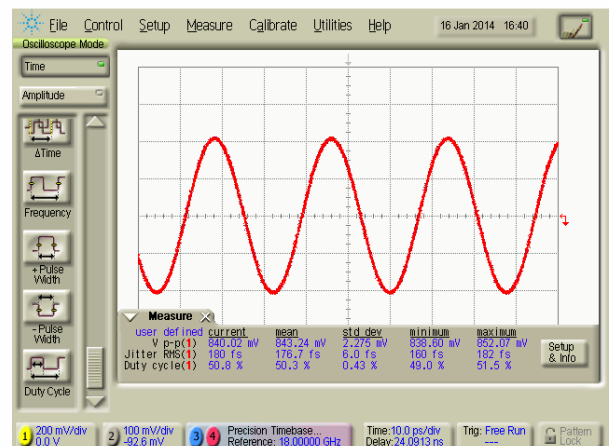
Output signal @ fin = 15 GHz



Output signal @ fin = 16 GHz



Output signal @ fin = 17 GHz



Output signal @ fin = 18 GHz



Mechanical Drawing

