FDZ5013 /
FDZ5013C


6 TO 24 GHZ
FREQUENCY DOUBLER

- INPUT: 3 TO 12 GHz
- OUTPUT: 6 TO 24 GHz
- INPUT DRIVE LEVEL: +13 dBm (NOMINAL)
- HERMETICALLY-SEALED PACKAGE

Specifications (Rev. Date: 2/02)*

Characteristics	Typical	Guaranteed	
		+25°C	-54° to +85°C
Conversion Loss (max.) F_{in} = 3 to 12 GHz	12.0 dB	14.5 dB	15.0 dB
Fundamental Suppression (min.) F_{in} = 5 to 8 GHz F_{in} = 3 to 9 GHz F_{in} = 3 to 12 GHz	 15.0 dBc 13.0 dBc 11.0 dBc	 11.0 dBc 9.5 dBc 8.0 dBc	 9.0 dBc 7.5 dBc 6.0 dBc
Third Harmonic Suppression F_{in} = 3.0 to 5.0 GHz F_{in} = 5.0 to 8.5 GHz	 25 dBc 22 dBc	 20 dBc 17 dBc	 18 dBc 15 dBc
Input VSWR F_{in} = 5 to 10 GHz F_{in} = 3 to 12 GHz	 1.7:1 2.0:1		

*Measured in a 50-ohm system at +25°C with nominal input drive level. Typical values are measured at +25°C and are not guaranteed.

Absolute Maximum Ratings

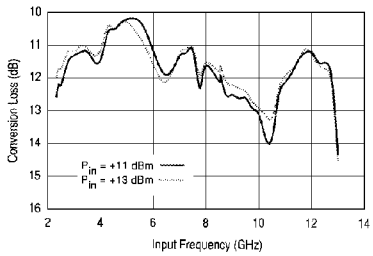
Operating Temperature	-54° to +100°C
Storage Temperature	-65° to +125°C
Peak Input Power	+23 dBm max. @ +25°, +20 dBm max. @ +100°C

Outline Drawings

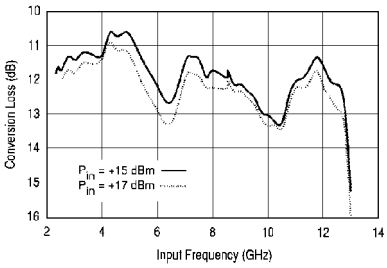
Package	Figure	Model
Versapac	JF	FDZ5013
SMA Connectorized	JE	FDZ5013C

Typical Performance at 25°C

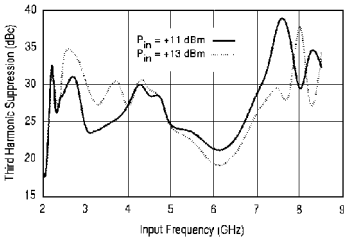
Conversion Loss vs. Frequency



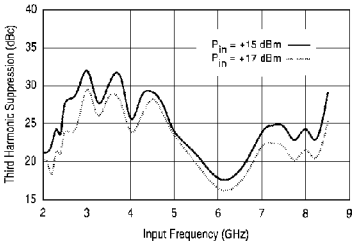
Conversion Loss vs. Frequency



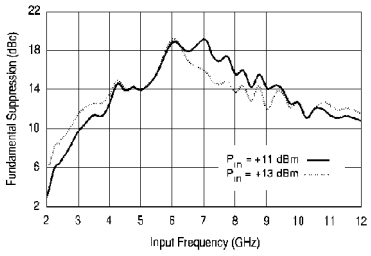
3rd Harmonic Suppression vs. Frequency



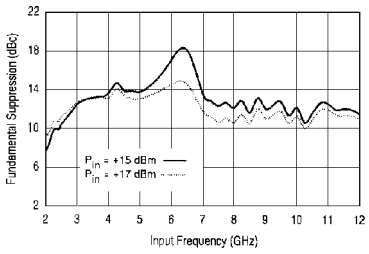
3rd Harmonic Suppression vs. Frequency



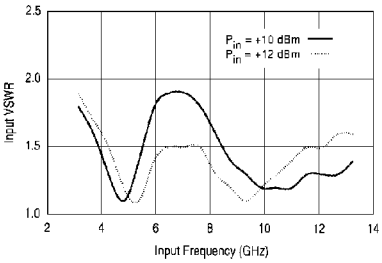
Fundamental Suppression vs. Frequency



Fundamental Suppression vs. Frequency



VSWR vs. Frequency



VSWR vs. Frequency