

# FD25H / FD25HC SFD25H







## **FREQUENCY DOUBLER**

- INPUT: 5 TO 2400 MHz •
- **OUTPUT: 10 TO 4800 MHz** •
- INPUT DRIVE LEVEL +23 dBm (NOMINAL) •
- HERMETICALLY-SEALED PACKAGE •

## Specifications (Rev. Date: 2/02)\*

Characteristics	Typical	Guaranteed	
		+25°C	-54° to +85°C
Conversion Loss (max.)			
$F_{in} = 5$ to 2400 MHz	12.0 dB	13.5 Db	13.8 dB
Fundamental Suppression (min.)			
$F_{in} = 5$ to 1000 MHz	35 dBc	25 dBc	24 dBc
$F_{in} = 1000$ to 2000 MHz	25 dBc	20 dBc	19 dBc
$F_{in} = 2000$ to 2400 MHz	20 dBc	16 dBc	15 dBc
Third Harmonic Suppression			
$F_{in} = 5$ to 500 MHz	40 dBc	30 dBc	29 dBc
$F_{in} = 500 \text{ to } 2400 \text{ MHz}$	35 dBc	25 dBc	24 dBc
Input VSWR			
$F_{in} = 5$ to 2400 MHz	1.5:1		

\*Measured in a 50-ohm system at +25°C with nominal input drive level. Guaranteed conversion loss values for FD25HC are 0.5 worse, and only guaranteed from 0°C to 50°C. Typical values are measured at +25°C and are not guaranteed.

## **Absolute Maximum Ratings**

Operating Temperature	-54° to +100°C
Storage Temperature	-65° to +100°C
Peak Input Power	+26 dBm max. @ +25°, +23 dBm max. @ +100°C

### **Outline Drawings**

Package	Figure	Model
TO-8	BC	FD25H
SMA Connectorized	CD	FD25HC
Surface Mount	AF	SFD25H

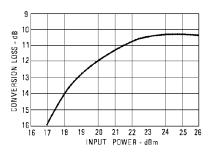


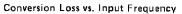


## FD25H / FD25HC / SFD25H

## Typical Performance at 25°C

#### Conversion Loss vs. Input Power





NPUT POWER = +23 dBm

100 200 500 1000 2000 4000

9

뜅 10

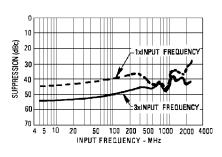
15

4 5 10

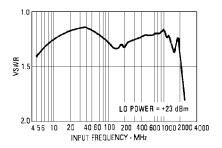
20 50

INPUT FREQUENCY - MHz

Harmonic Suppression vs. Input Frequency



VSWR vs. Frequency



Specifications subject to change without notice. • North America: 1-800-366-2266 Visit www.macom.com for complete contact and product information.

