

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.)			
$F_{in} = 5 \text{ to } 2400 \text{ MHz}$	12.0 dB	13.5 Db	13.8 dB
Fundamental Suppression (min.)			
$F_{in} = 5 \text{ to } 1000 \text{ MHz}$	35 dBc	25 dBc	24 dBc
$F_{in} = 1000 \text{ to } 2000 \text{ MHz}$	25 dBc	20 dBc	19 dBc
$F_{in} = 2000 \text{ to } 2400 \text{ MHz}$	20 dBc	16 dBc	15 dBc
Third Harmonic Suppression			
$F_{in} = 5 \text{ to } 500 \text{ MHz}$	40 dBc	30 dBc	29 dBc
$F_{in} = 500 \text{ to } 2400 \text{ MHz}$	35 dBc	25 dBc	24 dBc
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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

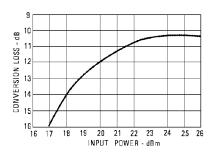
Package	Figure	Model
TO-8	BC	FD25H
SMA Connectorized	CD	FD25HC
Surface Mount	AF	SFD25H



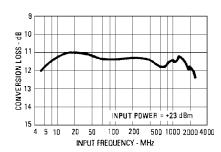


Typical Performance at 25°C

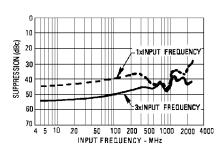
Conversion Loss vs. Input Power



Conversion Loss vs. Input Frequency



Harmonic Suppression vs. Input Frequency



VSWR vs. Frequency

