



# 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 $F_{in} = 1000$ to 2000 MHz $F_{in} = 2000$ to 2400 MHz	35 dBc 25 dBc 20 dBc	25 dBc 20 dBc 16 dBc	24 dBc 19 dBc 15 dBc
Third Harmonic Suppression $F_{in} = 5$ to 500 MHz $F_{in} = 500$ to 2400 MHz	40 dBc 35 dBc	30 dBc 25 dBc	29 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

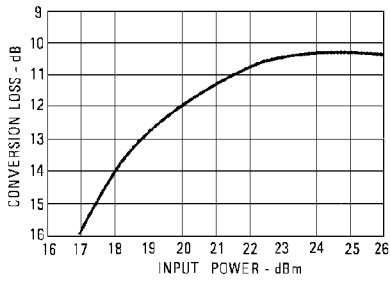
Operating Temperature	-54° to +100°C
Storage Temperature	-65° to +100°C
Peak Input Power	+26 dBm max. @ +25°, +23 dBm max. @ +100°C

### Outline Drawings

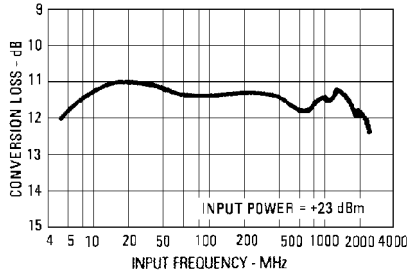
Package	Figure	Model
TO-8	BC	FD25H
SMA Connectorized	CD	FD25HC
Surface Mount	AF	SFD25H

Typical Performance at 25°C

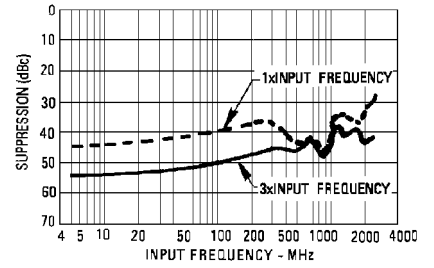
Conversion Loss vs. Input Power



Conversion Loss vs. Input Frequency



Harmonic Suppression vs. Input Frequency



VSWR vs. Frequency

