



# FD25 / FD25C

# FD25E / SFD25



## FREQUENCY DOUBLER

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

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

Characteristics	Typical	Guaranteed	
		+25°C	-54° to +85°C
Conversion Loss (max.) F <sub>in</sub> = 5 to 2400 MHz	11.5 dB	13.0 dB	13.5 dB
Fundamental Suppression (min.) F <sub>in</sub> = 5 to 1000 MHz F <sub>in</sub> = 1000 to 2000 MHz F <sub>in</sub> = 2000 to 2400 MHz	35 dBc 25 dBc 20 dBc	25 dBc 20 dBc 16 dBc	23 dBc 18 dBc 14 dBc
Third Harmonic Suppression F <sub>in</sub> = 5 to 500 MHz F <sub>in</sub> = 500 to 1000 MHz F <sub>in</sub> = 1000 to 2400 MHz	50 dBc 40 dBc 35 dBc	40 dBc 30 dBc 25 dBc	38 dBc 28 dBc 23 dBc
Input VSWR F <sub>in</sub> = 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 FD25C 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

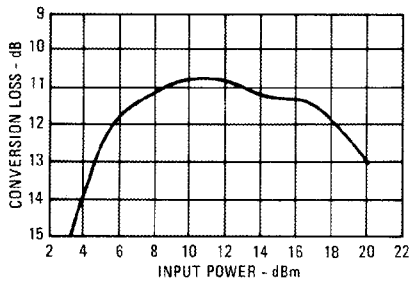
Operating Temperature	-54° to +100°C
Storage Temperature	-65° to +100°C
Peak Input Power	+23 dBm max. @ +25°, +20 dBm max. @ +100°C

### Outline Drawings

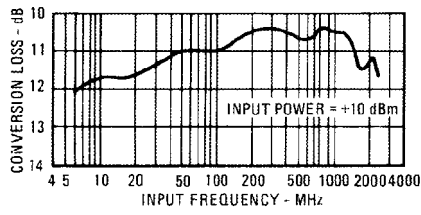
Package	Figure	Model
TO-8	BC	FD25
SMA Connectorized	CD	FD25C
Flatpack	EB	FD25E
Surface Mount	AF	SFD25

Typical Performance at 25°C

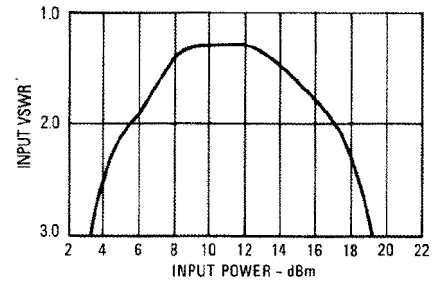
Conversion Loss vs. Input Power



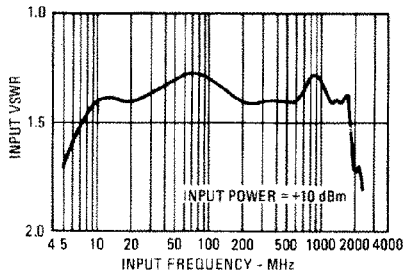
Conversion Loss vs. Frequency



Input VSWR vs. Input Power



Input VSWR vs. Input Frequency



Suppression vs. Input Frequency

