

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 |

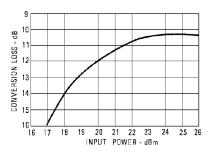


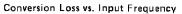


FD25H / FD25HC / SFD25H

Typical Performance at 25°C

Conversion Loss vs. Input Power





NPUT POWER = +23 dBm

100 200 500 1000 2000 4000

9

뜅 10

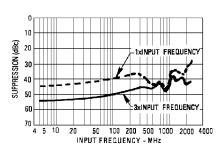
15

4 5 10

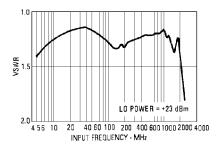
20 50

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.

