

FD93 / FD93C





FREQUENCY DOUBLER

INPUT: 2 TO 9 GHz **OUTPUT: 4 TO 18 GHz**

INPUT DRIVE LEVEL: +12 dBm (NOMINAL)

HERMETICALLY-SEALED PACKAGE

Specifications (Rev. Date: 2/02)*

Characteristics	Typical	Guaranteed	
		+25°C	-54° to +85°C
Conversion Loss (max.)	·		
$F_{in} = 2 \text{ to } 4 \text{ GHz}$	10.0 dB	13.0 dB	13.5 dB
$F_{in} = 4 \text{ to } 9 \text{ MHz}$	12.0 dB	14.0 dB	14.5 dB
Fundamental Isolation (min.)			
$F_{in} = 2 \text{ to } 9 \text{ GHz}$	25 dB	18 dB	16 dB
Third Harmonic Suppression			
$F_{in} = 2 \text{ to } 6 \text{ GHz}$	25 dBc	17 dBc	15 dBc
Input VSWR			
$F_{in} = 2 \text{ to } 9 \text{ GHz}$	1.5:1		

^{*}Measured in a 50-ohm system at +25°C with nominal input drive level. Typical values are measured at +25°C and are not guaranteed.

Absolute Maximum Ratings

Operating Temperature	-54° to $+100^{\circ}$ C
Storage Temperature	-65° to $+100^{\circ}$ C
Peak Input Power	+23 dBm max. @ +25°, +20 dBm max. @ +100°C

Outline Drawings

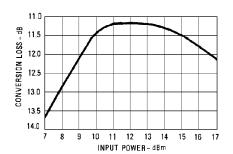
Package	Figure	Model
Minpac	DQ	FD93
SMA Connectorized	DP	FD93C



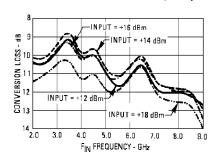


Typical Performance at 25°C

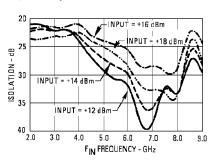
Conversion Loss vs. Input Power



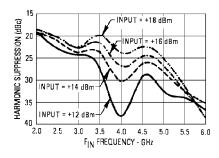
Conversion Loss vs. Input Frequency



Input/Output Isolation



Suppression vs. Input Frequency



VSWR vs. Frequency

