

FREQUENCY DOUBLER

FD34SMH-1

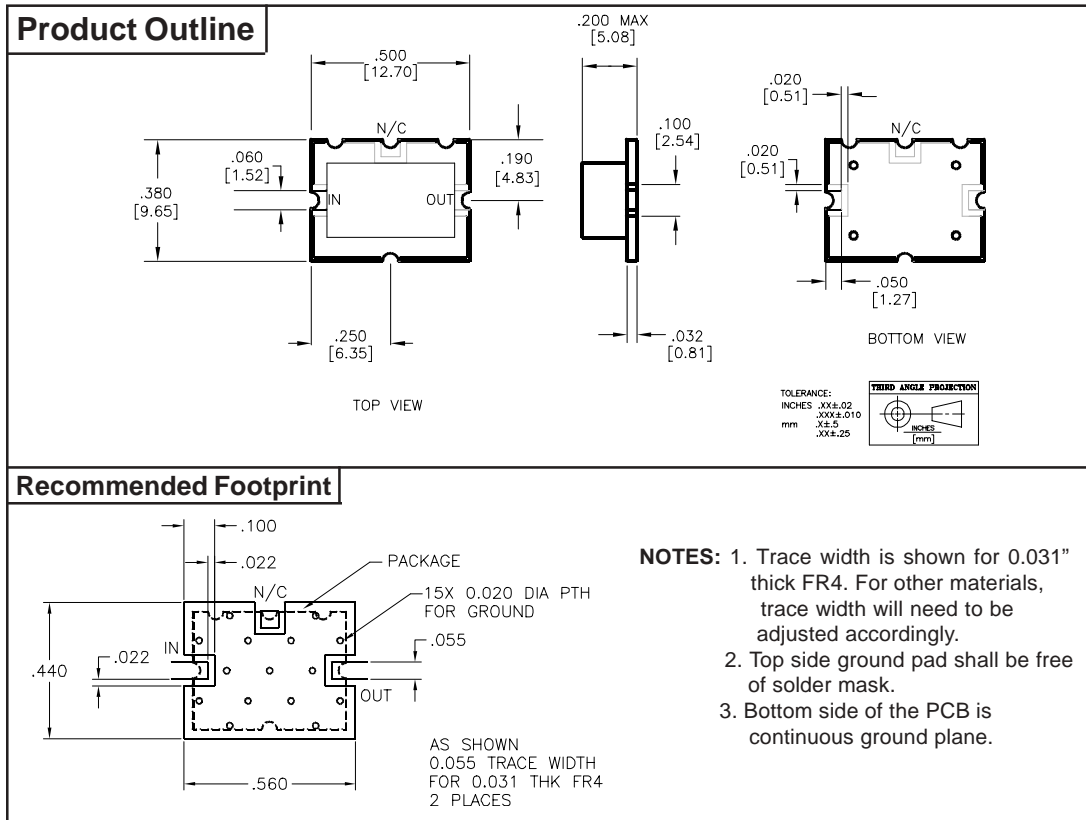
5 - 2400 MHz

Features

- Input 5 to 2400 MHz
- Output 10 to 4800 MHz
- Input Drive Level +10 dBm (nominal)
- Surface Mount Package

Description

The FD34SMH-1 is a passive bridge diode frequency doubler, designed for use in commercial and test equipment applications. The design utilizes Schottky bridge quad diodes and broadband ferrite baluns to attain excellent performance.



Electrical Specifications: $Z_o = 50 \text{ Ohms}$ $P_{in} = +10 \text{ dBm}$

PARAMETER	TEST CONDITIONS	TYPICAL	GUARANTEED	
			+25 °C	-54°C to +85 °C
SSB Conversion Loss (dB)	$f_{in} = 5 \text{ to } 30 \text{ MHz}$	12.0	14.0	15.0 Max.
	$f_{in} = 30 \text{ to } 2400 \text{ MHz}$	11.5	13.0	13.5 Max.
Fundamental Suppression (dBc)	$f_{in} = 5 \text{ to } 1000 \text{ MHz}$	35	23	22 Min.
	$f_{in} = 1000 \text{ to } 2000 \text{ MHz}$	25	20	18 Min.
	$f_{in} = 2000 \text{ to } 2400 \text{ MHz}$	20	16	14 Min.
Third Harmonic Suppression (dBc)	$f_{in} = 5 \text{ to } 500 \text{ MHz}$	45	36	34 Min.
	$f_{in} = 500 \text{ to } 1000 \text{ MHz}$	40	30	28 Min.
	$f_{in} = 1000 \text{ to } 2400 \text{ MHz}$	35	25	23 Min.
Input VSWR	$f_{in} = 5 \text{ to } 2400$	1.5:1		

