

CSFD25H

Low Cost Frequency Doubler

Rev. V2

Features

- INPUT: 10 TO 2400 MHz
- OUTPUT: 20 TO 4800 MHz
- INPUT DRIVE LEVEL +23 dBm (NOMINAL)
- SURFACE MOUNT

Description

The CSFD25H is a passive bridge diode frequency doubler, designed for use in the high volume wireless and test equipment applications. The design utilizes Schottky bridge quad diodes and broadband baluns to attain excellent performance. Due to the use of high temperature solder and welded assembly processes used internally makes it ideal for use in semi-automated and automated assembly. Environmental screening available to MIL-STD-883, MIL-STD-202 or MIL-DTL-28837, consult factory.

Product Image



Ordering Information

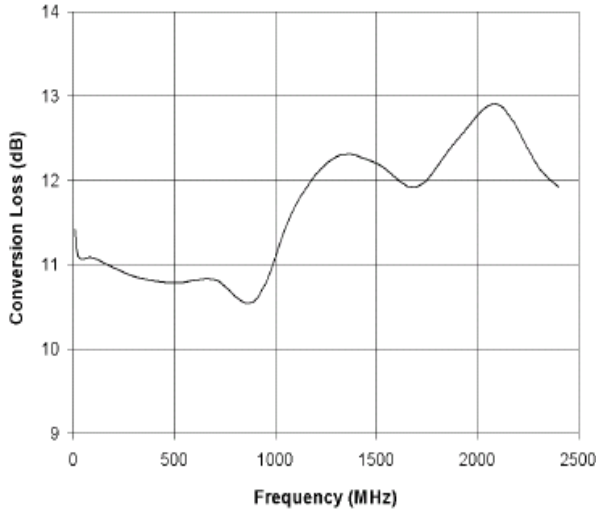
Part Number	Package
CSFD25H	Surface Mount

Electrical Specifications: $Z_0 = 50\Omega$ $P_{in} = +23$ dBm

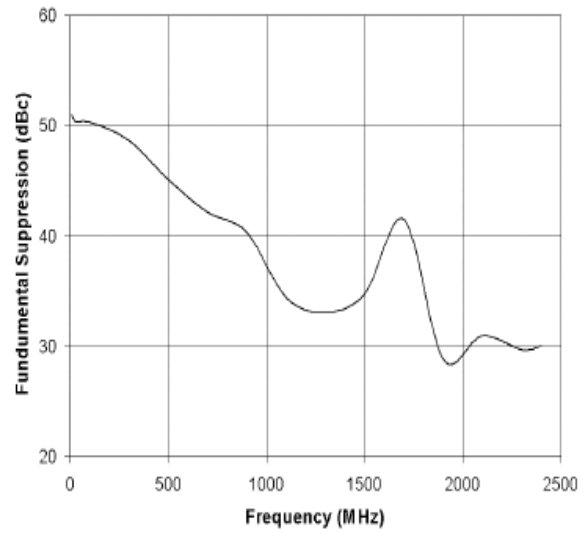
Parameter	Test Conditions	Units	Typical	Guaranteed	
				+25°C	-40° to +85°C
SSB Conversion Loss (max)	$f_{in} = 10$ to 2400 MHz	dB	12.0	13.5	13.8
Suppression Fundamental (min)	$f_{in} = 10$ to 1000 MHz $f_{in} = 1000$ to 2000 MHz $f_{in} = 2000$ to 2400 MHz	dBc	35	25	24
		dBc	25	20	19
		dBc	20	16	15
Third Harmonic Suppression (min)	$f_{in} = 10$ to 1000 MHz $f_{in} = 1000$ to 2400 MHz	dBc	40	30	29
		dBc	35	25	24
Input VSWR	$f_{in} = 10$ to 2400 MHz		2.0:1		

Typical Performance Curves

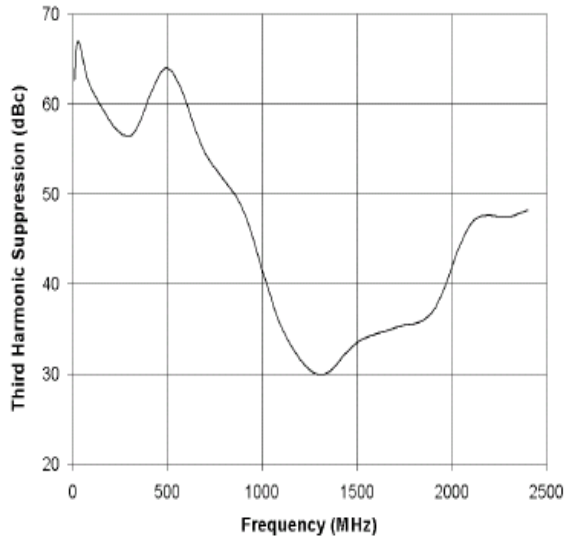
Conversion Loss vs. Frequency



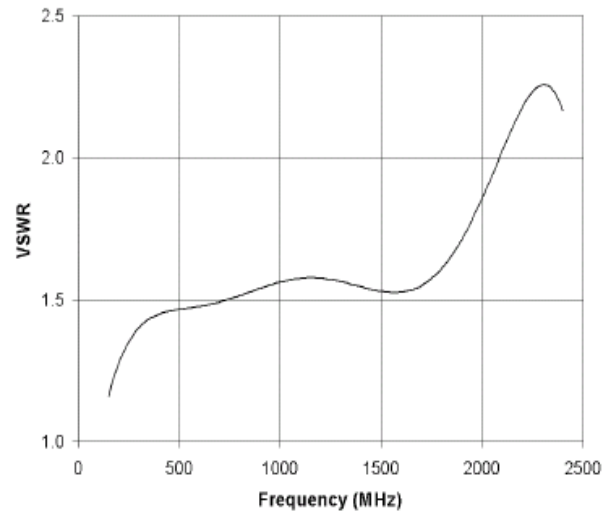
Fundamental Suppression vs. Frequency



Third Harmonic Suppression vs. Frequency



Input VSWR vs. Frequency



CSFD25H

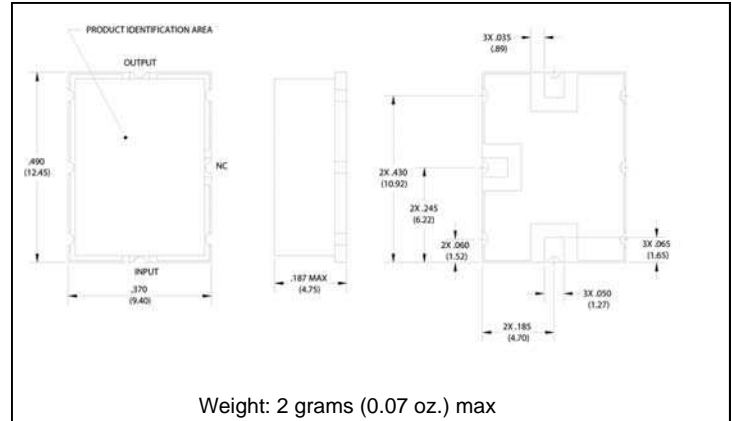
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Absolute Maximum Ratings

Parameter	Absolute Maximum
Operating Temperature	-54°C to +85°C
Storage Temperature	-65°C to +100°C
Peak Input Power	+23 dBm max @ +25°C +20 dBm max @ +100°C

Outline Drawing: Surface Mount *



* Dimensions are inches (millimeters) ± 0.015 (0.38) unless otherwise specified.