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

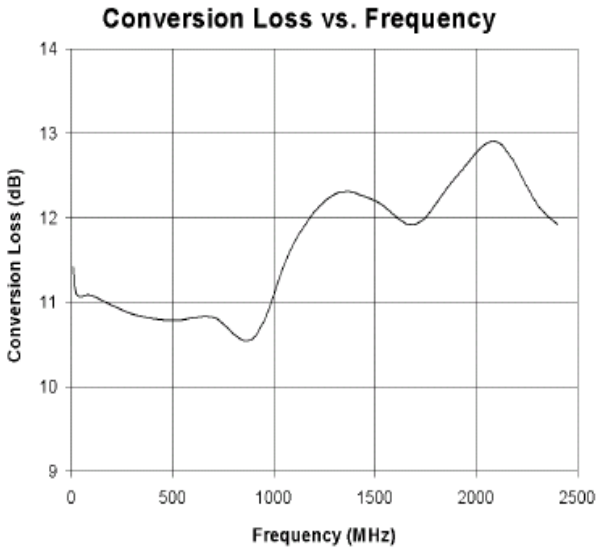
Ordering Information

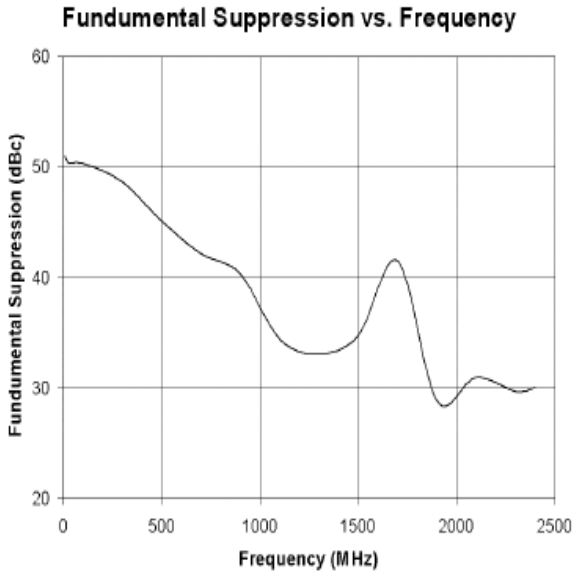
Part Number	Package
CSFD25H	Surface Mount

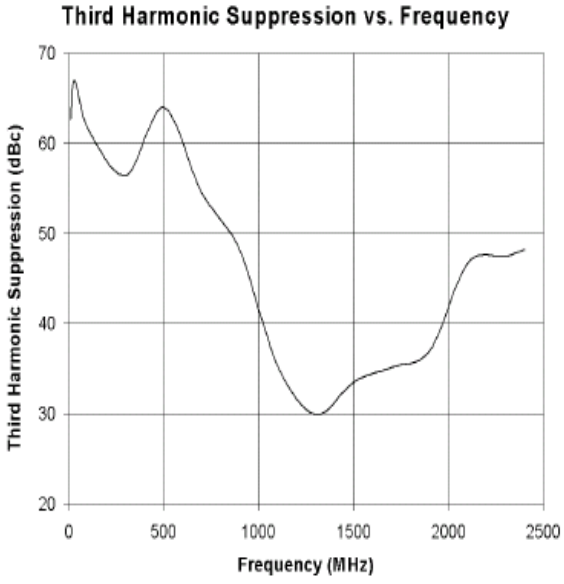
Electrical Specifications: $Z_0 = 50\Omega$ P_{in}= +23 dBm

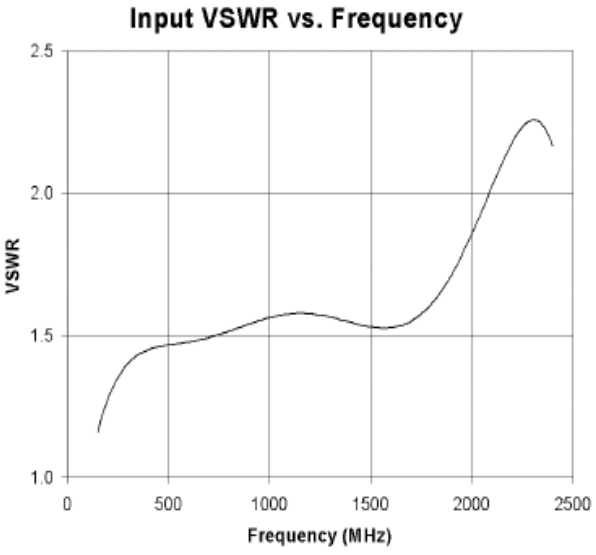
Parameter	Test Conditions	Units	Typical	Guaranteed	
				+25ºC	-40º to +85ºC
SSB Conversion Loss (max)	f_{in} = 10 to 2400 MHz	dB	12.0	13.5	13.8
Suppression Fundamental (min)	f_{in} = 10 to 1000 MHz f_{in} = 1000 to 2000 MHz f_{in} =2000 to 2400 MHz	dBc dBc dBc	35 25 20	25 20 16	24 19 15
Third Harmonic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

Typical Performance Curves





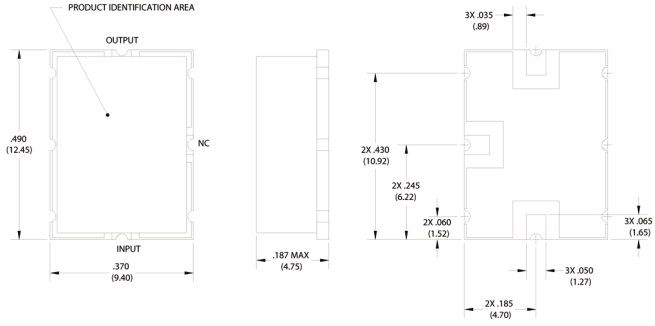




Absolute Maximum Ratings

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

Outline Drawing: Surface Mount *



Weight: 2 grams (0.07 oz.) max

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