Wire Wound Type Balun

BCM2012F2SF-SERIES

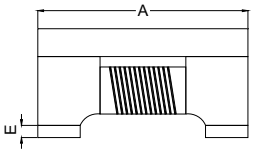
1. Features

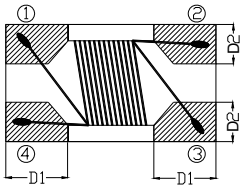
1. Low insertion loss at frequency range.
2. BCM2012F2SF series realizes small size and low profile. 2.0x1.2x1.2 mm.
3. 100% Lead(Pb) & Halogen-Free and RoHS compliant.
4. Operating temperature -40~+125℃ (Including self - temperature rise)

Halogen-free

RoHS

2. Dimension





Series	A(mm)	B(mm)	C(mm)	D1(mm)	D2(mm)	E(mm)
2012F2SF	2.0±0.2	1.2±0.2	1.2±0.2	0.50±0.1	0.51±0.1	0.15±0.1

3. Part Numbering

BCM	2012	F	2	S	F	-	750	11	-	122
A	B	C	D	E	F		G	H		I

A: Series
B: Dimension
C: Material Ferrite Core
D: Number of Lines 2=2 lines
E: Type S=Shielded , N=Unshielded
F: Lead free
G: Impedance Match 750= 75 ohm
H: Turns Rate 11=1：1
I: Control S/N Internal code

4. Specification

TAI-TECH Part Number	UB/B Impedance (Ω)	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Power (dBm) max.	Rated Volt. (DCV) max.	Withstand Volt. (DCV) max.	IR (MΩ) min.	Insertion Loss (dB)max	CMRR (dB)
BCM2012F2SF-50011-TE2	50/50	400~1800	0.50	27	20	125	10	2.2	15(typ.)
BCM2012F2SF-50011-T02	50/50	40~ 860	1.00	27	20	125	10	2.5	20(typ.)
BCM2012F2SF-50011-MN2	50/50	100~1000	0.35	27	20	50	10	1.0	10(min.)
BCM2012F2SF-50011-ST2	50/50	45~870	1.00	27	20	50	10	1.2	20(min.)
BCM2012F2SF-75011-TE2	75/75	400~1800	0.50	27	20	125	10	2.0	15(typ.)
BCM2012F2SF-75011-T02	75/75	50~1200	0.70	27	20	125	10	1.2	20(typ.)
BCM2012F2SF-75011-MS2	75/75	1000~1500	0.59	27	20	50	10	1.4	20(min.)

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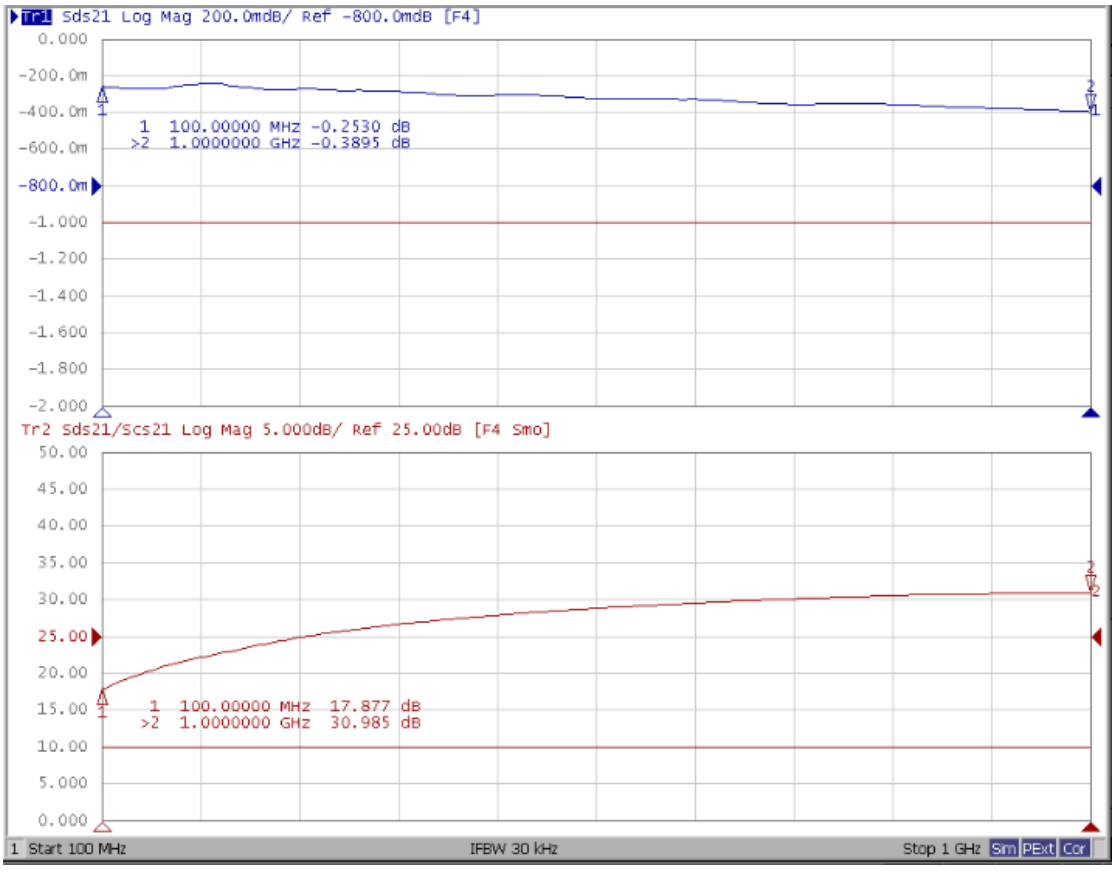
BCM2012F2SF-75011-MT2	75/75	50~1200	0.77	27	20	50	10	50~870MHz:1.0 870~1200MHz:1.2.	20(min.)
BCM2012F2SF-75011-SA2	75/75	45~870	0.88	27	20	50	10	1.0	20(min.)
BCM2012F2SF-75011-SB2	75/75	50~1200	0.70	27	20	50	10	1.2	20(min.)
BCM2012F2SF-75011-122	75/75	1000~1500	0.59	27	20	50	10	1.4	20(min.)

Insertion Loss& CMRR

BCM2012F2SF-50011-TE2

BCM2012F2SF-50011-T02

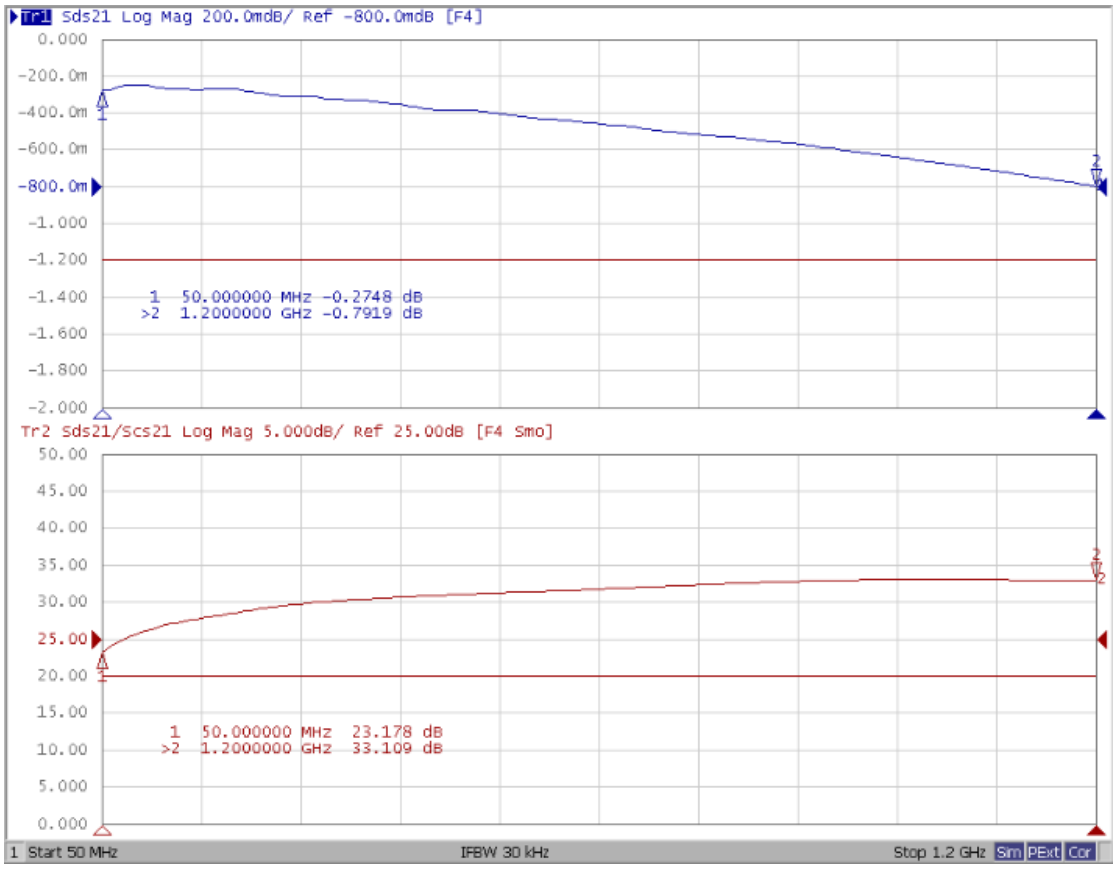
BCM2012F2SF-50011-MN2



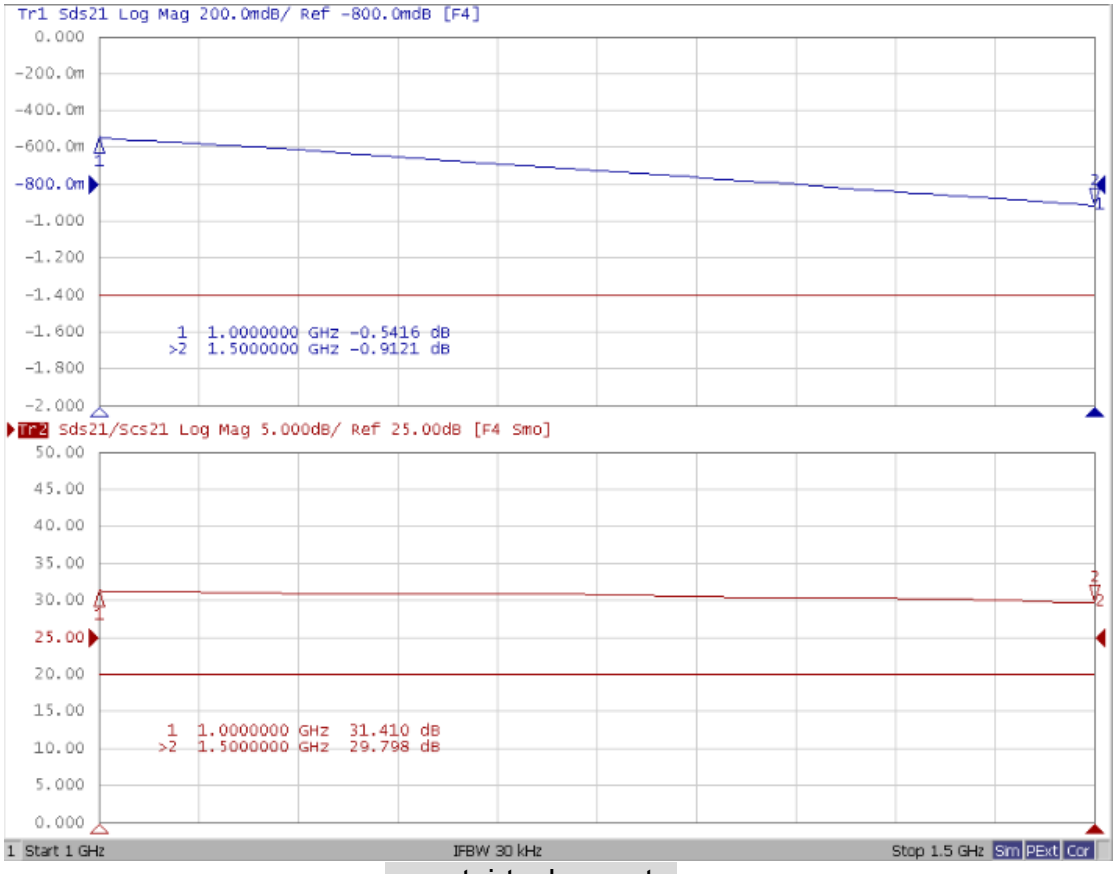
BCM2012F2SF-50011-ST2

BCM2012F2SF-75011-TE2

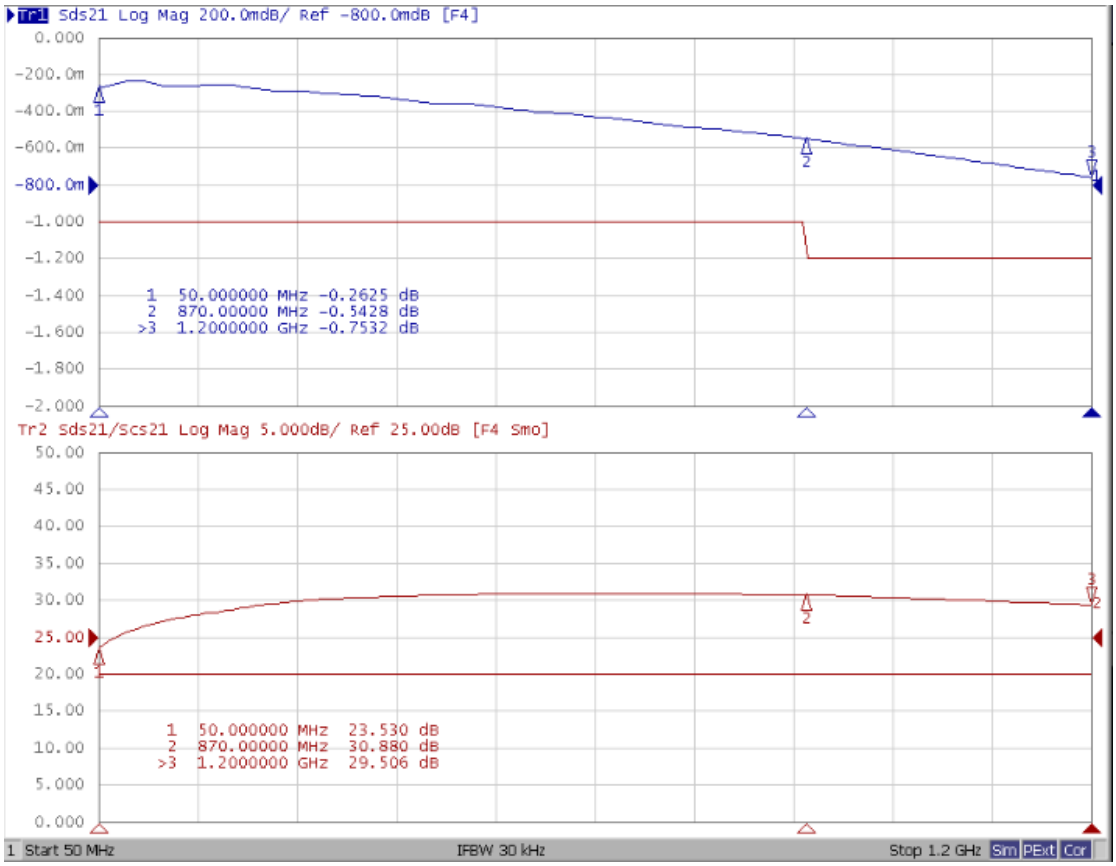
BCM2012F2SF-75011-T02



BCM2012F2SF-75011-MS2

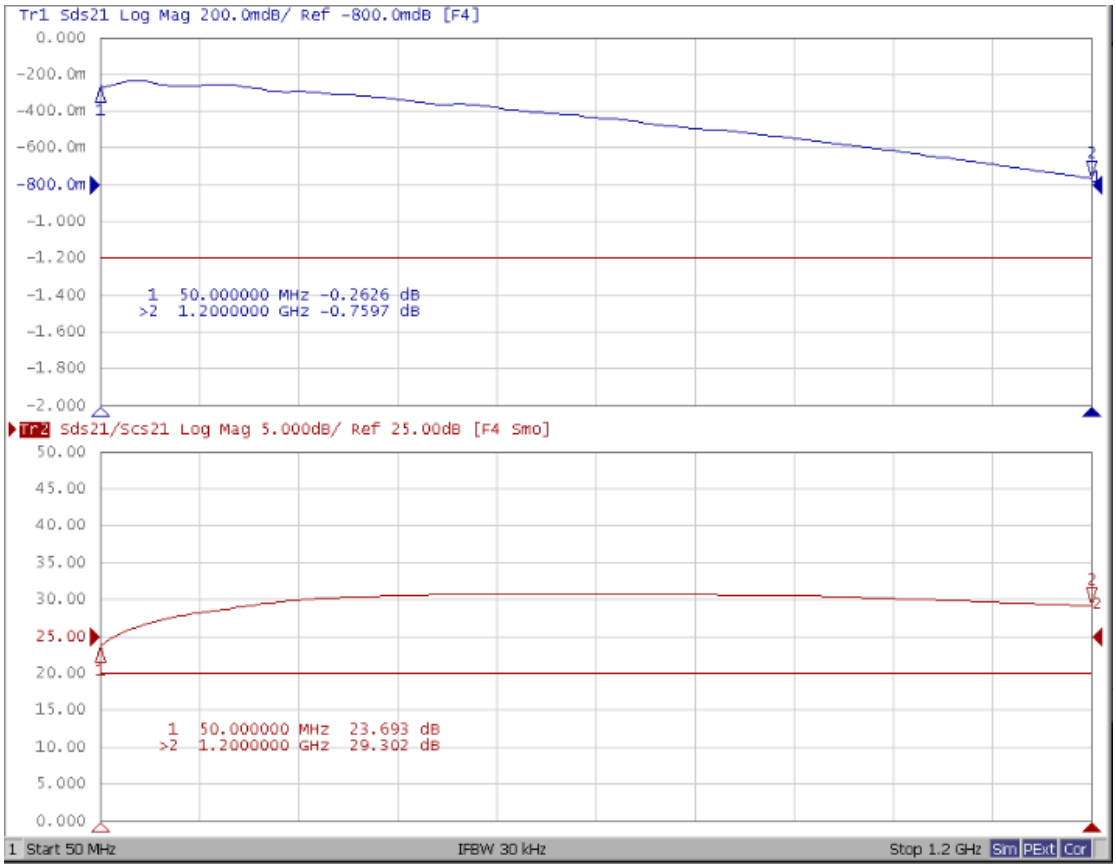


BCM2012F2SF-75011-MT2

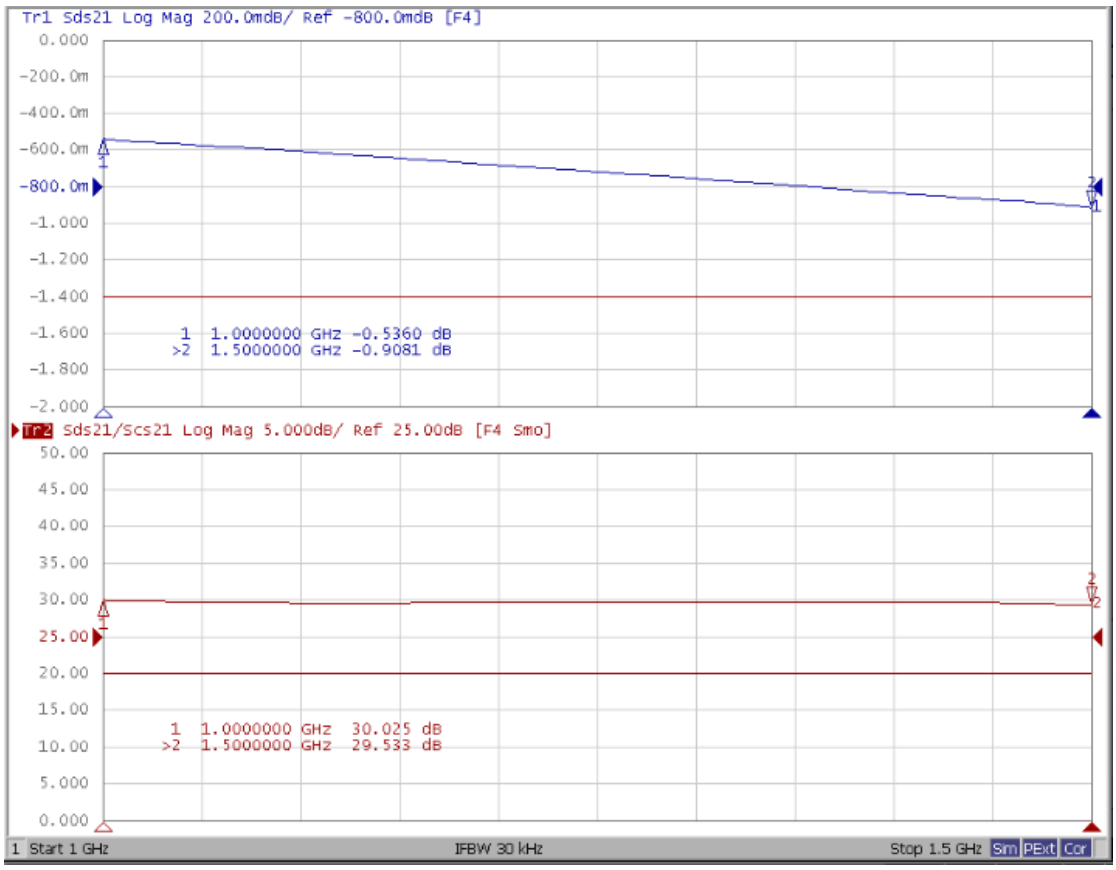


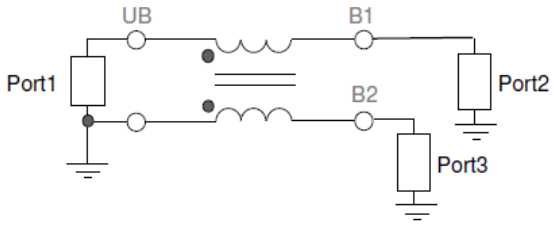
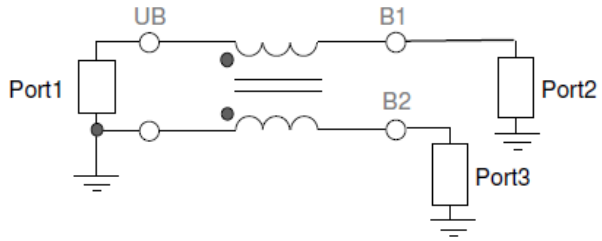
BCM2012F2SF-75011-SA2

BCM2012F2SF-75011-SB2

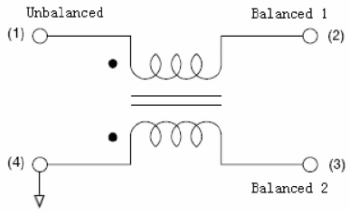


BCM2012F2SF-75011-122



ITEM	Definition and Measurement Method
Insertion Loss	Insertion Loss is measured with Vector Network Analyzer (VNA) . Insertion Loss is Sds21 mag extracted from the following circuit. Parasitics and loss factors caused by the test board have to be removed by “De-embedding” computation. IL[dB] = 20log10(Sds21) Where Sds21 is S-parameter of single mode stimulus - Differential mode response 
CMRR	Common Mode Rejection Ratio (CMRR) is a function of both amplitude imbalance and phase imbalance. If a differential VNA is not available, CMRR can be computed based on single ended measurement. CMRR[dB] = 20log10(Sds21/Scs21) = 20log10{(S21+S31)/(S21-S31)} Where Sds21 is S-parameter of single mode stimulus - Differential mode response Scs21 is S-parameter of single mode stimulus - Common mode response Measurement setup for the single ended measurement is as follows. It is assumed that the single-ended S-parameters are obtained with proper matched-load termination at each port. Parasitics and loss factors caused by the test board have to be removed by “De-embedding” computation. 

5. Schematic Diagram



6. Soldering and Mounting

6-1. Recommended PC Board Pattern

	BCM2012F2S
L(mm)	2.60
H(mm)	1.40
G1(mm	1.25
G2(mm	0.45