

# Wire Wound Chip Balun Transformer – BW Series

Operating Temp. : -40°C ~+ 85°C



## FEATURES

- Winding structure and small size
- Surface mount type
- Low insertion loss at frequency range
- Excellent solderability

## APPLICATIONS

- Balanced unbalanced transformation between antenna and cable (TV tuner)

## PRODUCT IDENTIFICATION

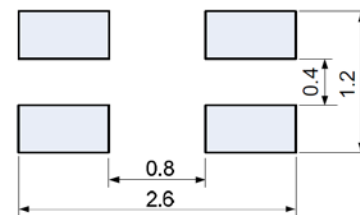
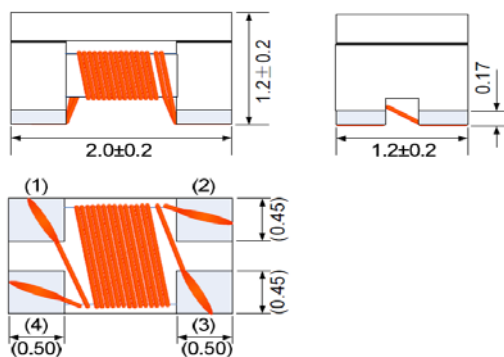
<u>B</u> ①	<u>W</u> ②	<u>21</u> ③	<u>S</u> ④	<u>75</u> ⑤	<u>11</u> ⑥	<u>A01</u> ⑦	<u>T</u> ⑧	<u>F</u> ⑨
①	Type		Structure		External Dimensions (LxW) (mm)			
B	Chip Balun Transformer		Winding Type		21		2.0x1.2	
	43		50Ω		4.5x3.2			
④	Type of Transformer		Port Impedance		Impedance Ratio			
S	Standard		75		75Ω		1:1	
C	Internal Code		50		50Ω		One to One	
⑦	Characteristic Code		⑧		⑨			
A01			Packing		Hazardous Substance Free Products			
B02			Tape Carrier Package		F			
C01								
D01								
E01								

## SHAPE AND DIMENSIONS

BW21S Series

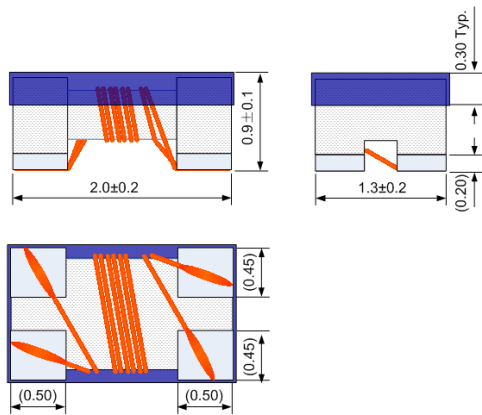
Land Pattern

Unit: mm



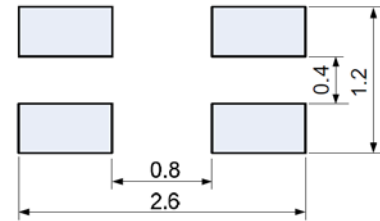
## SHAPE AND DIMENSIONS

### BW21C Series

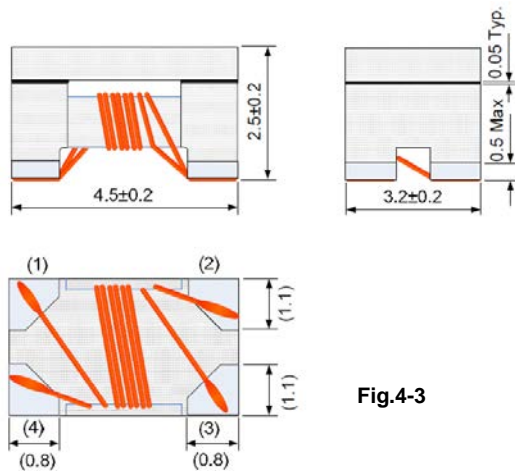


### Land Pattern

Unit: mm



### BW43S Series



### Land Pattern

Unit: mm

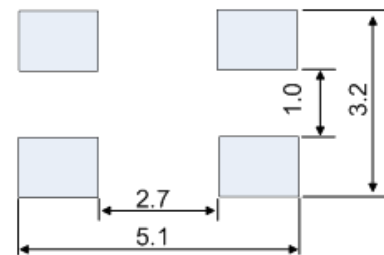


Fig.4-3

## SPECIFICATIONS

### BW21S TYPE

Part Number	Freq. Range	Port Impedance	Insertion Loss at Freq. Range	CMRR at Freq. Range(Min.)	Rated Power
Units	MHz	$\Omega$	dB	dB	dBm
BW21S7511A01TF	45~870	75/75	1.0	20	27
BW21S5011A01TF	45~870	50/50	1.2	20	27
BW21S7511B02TF	50~1200	75/75	1.2	20	27
BW21S7511C01TF	1000~1500	75/75	1.4	20	27
BW21S7511D01TF	950~2150	75/75	1.5	20	27
BW21S7511E01TF	400~1800	75/75	2.0	10	27

### BW21C TYPE

Part Number	Freq. Range	Port Impedance	Inductance	Insertion Loss	Return Loss	DC Resistance	Rated Current	CMRR	Insulation Resistance
Units	MHz	$\Omega$	$\mu$ H	dB	dB	$\Omega$	mA	dB	M $\Omega$
BW21C2511A01TF	13.56	25/25	1.0 Min.	1.0 Max.	13 typ.	0.75 Max.	220 Min	47 Min.	10 Min.

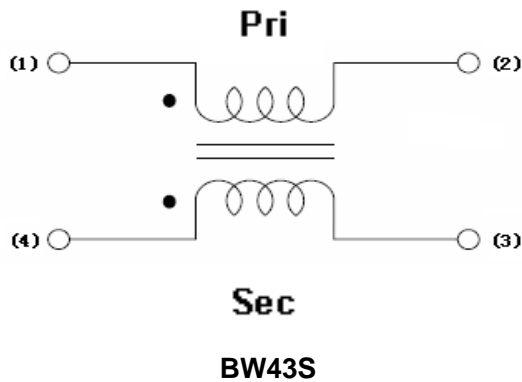
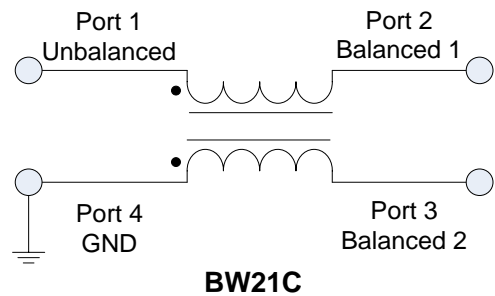
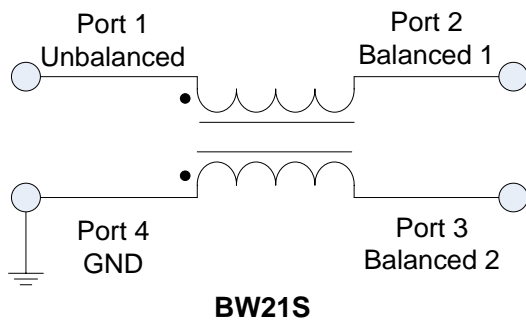
## SPECIFICATIONS

### BW43S TYPE

Part Number	Freq. Range	Inductance @50MHz	Port Impedance	Insertion Loss	DC Resistance	Rated Current	Rated Voltage	Insulation Resistance (M $\Omega$ )
Units	MHz	$\mu$ H	$\Omega$	dB	$\Omega$	mA	VDC	dB
BW43S5011C01TF	4~200	1.25 Typ	50/50	2.52 Typ	0.40 Max	540 Max	50	10 Min
BW43S5011E01TF	48~645	1.00 Typ	50/50	6.66 Typ	0.15 Max	960 Max	50	10 Min

※Products with other electrical characteristics can be provided upon customer's request. Please contact your local sales.

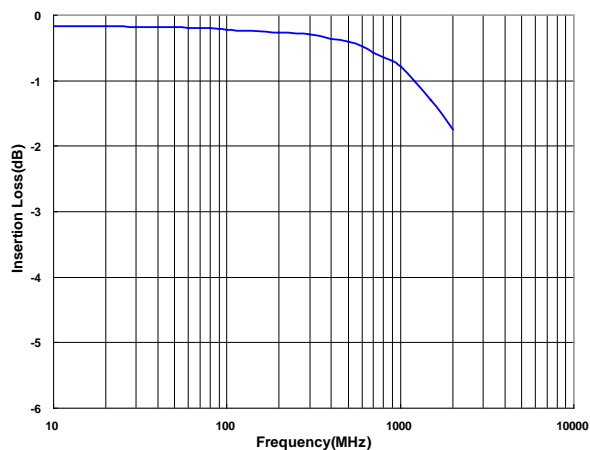
## EQUIVALENT CIRCUIT



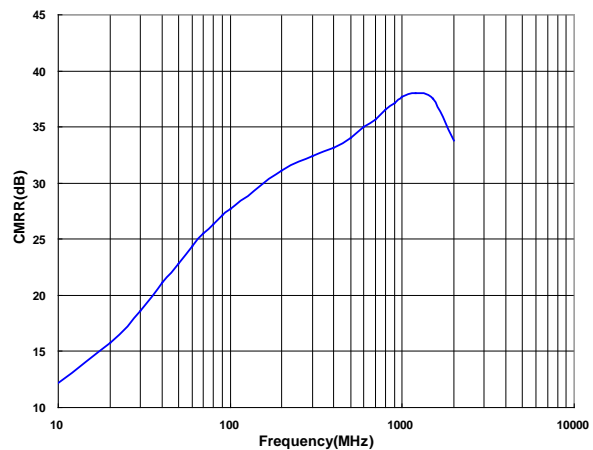
## TYPICAL ELECTRICAL CHARACTERISTICS

### BW21S7511A01TF

Insertion Loss Characteristics



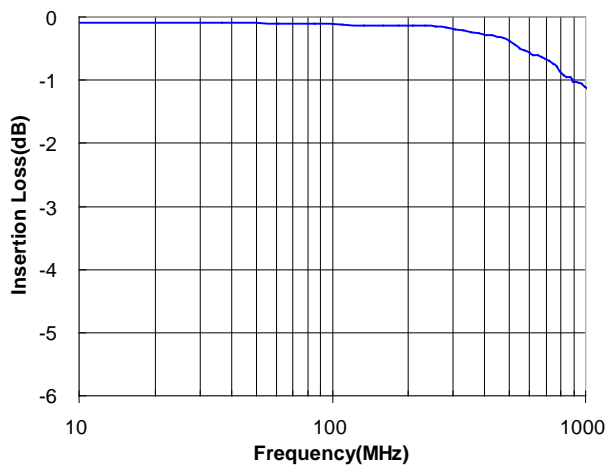
CMRR Characteristics



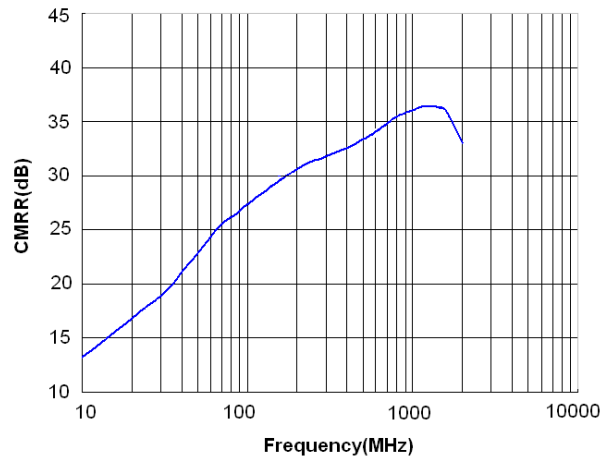
# TYPICAL ELECTRICAL CHARACTERISTICS

BW21S5011A01TF

Insertion Loss Characteristics

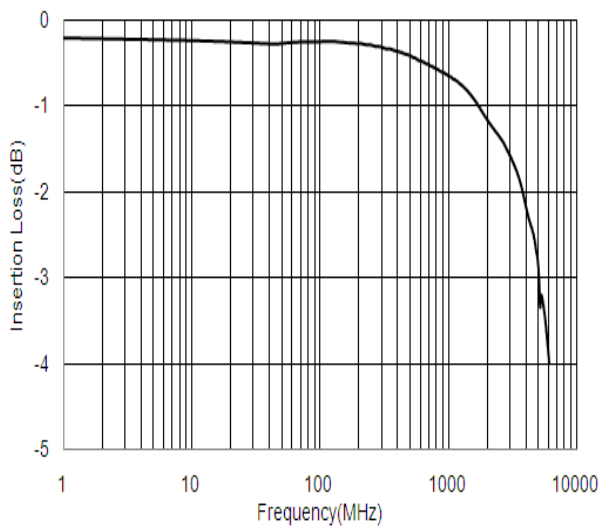


CMRR Characteristics

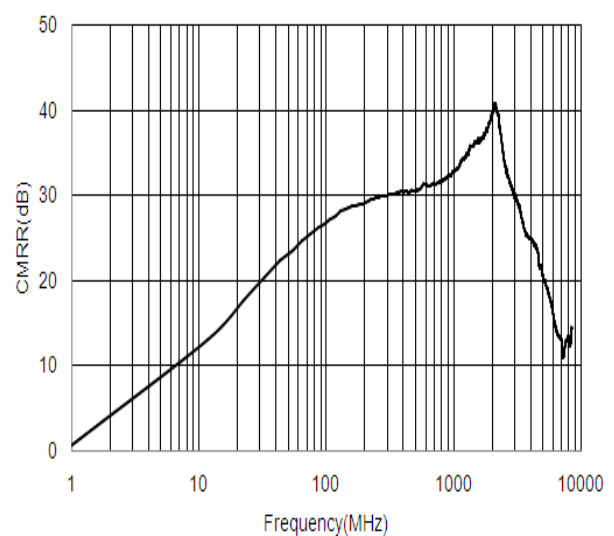


BW21S7511B02TF

Insertion Loss Characteristics

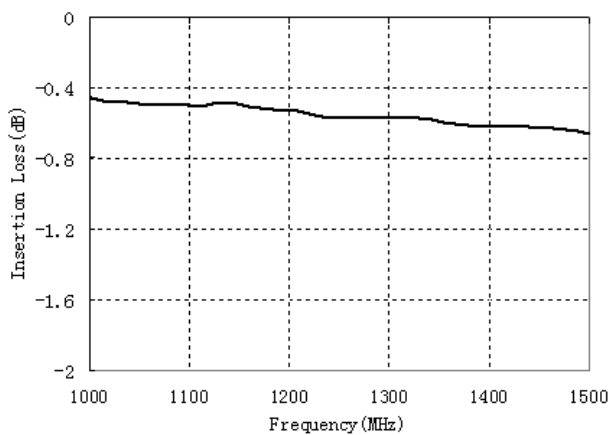


CMRR Characteristics

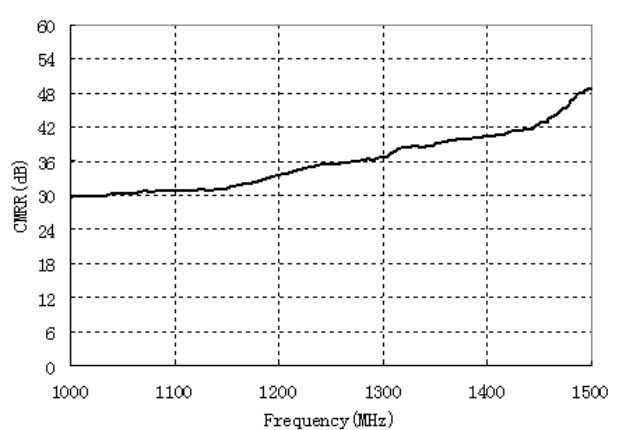


BW21S7511C01TF

Insertion Loss Characteristics



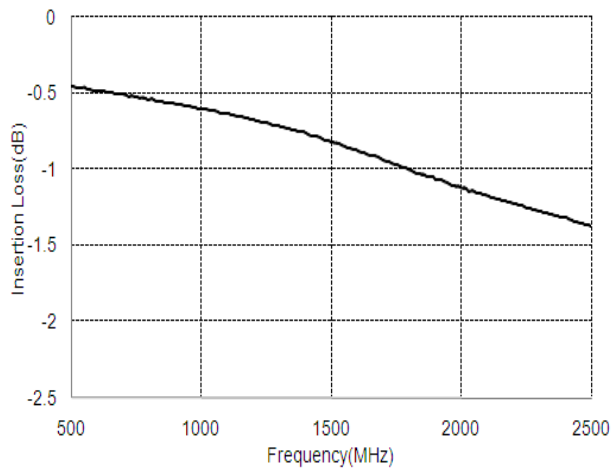
CMRR Characteristics



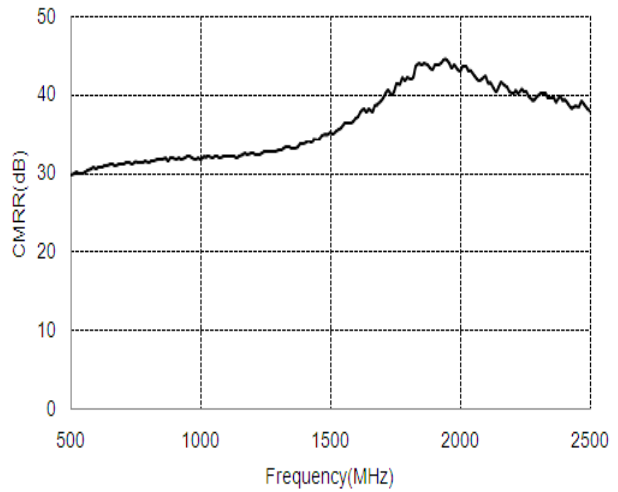
## TYPICAL ELECTRICAL CHARACTERISTICS

BW21S7511D01TF

Insertion Loss Characteristics

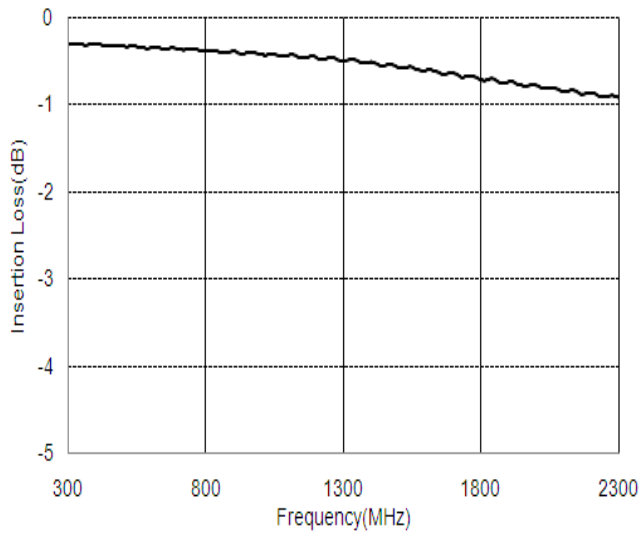


CMRR Characteristics

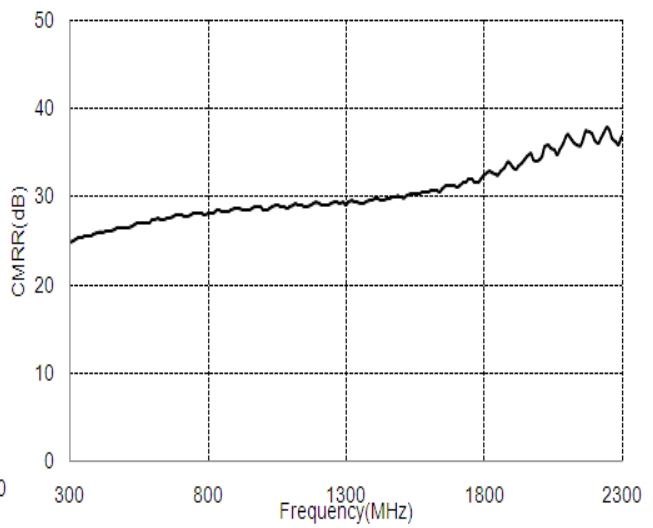


BW21S7511E01TF

Insertion Loss Characteristics

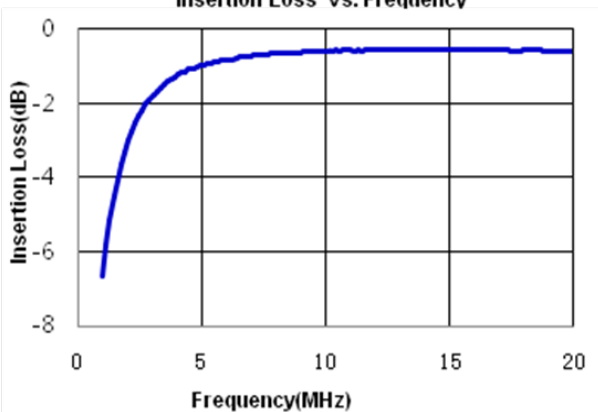


CMRR Characteristics

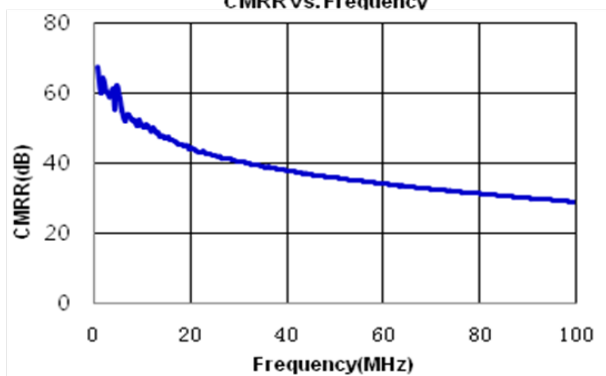


BW21C2511A01TF

Insertion Loss vs. Frequency

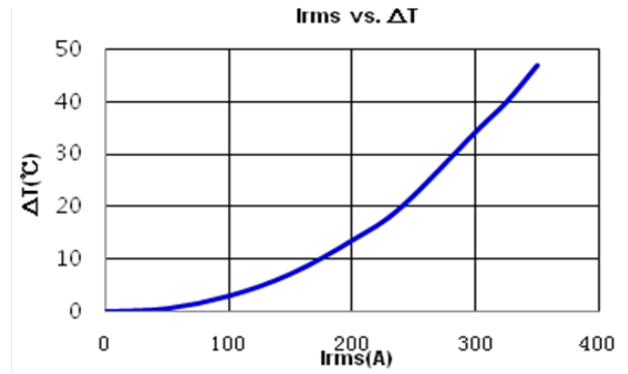
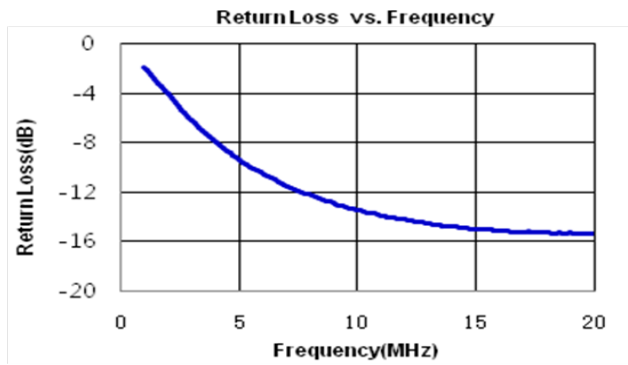


CMRR vs. Frequency



## TYPICAL ELECTRICAL CHARACTERISTICS

BW21C2511A01TF



BW43S5011C01TF/BW43S5011E01TF

Insertion Loss Characteristics

