

# Wire Wound Chip Balun Wide Band Transformer

ABT-8



RoHS / RoHS II Compliant



2.0 x 1.2 x 1.2mm

## FEATURES

- Small size and low profile SMT package
- Low insertion loss within working frequency range
- 1:1 impedance ratio
- Excellent solderability

## APPLICATIONS:

- Balanced unbalanced transformation between antenna and cable for TV tuner, STB

## ELECTRICAL SPECIFICATIONS:

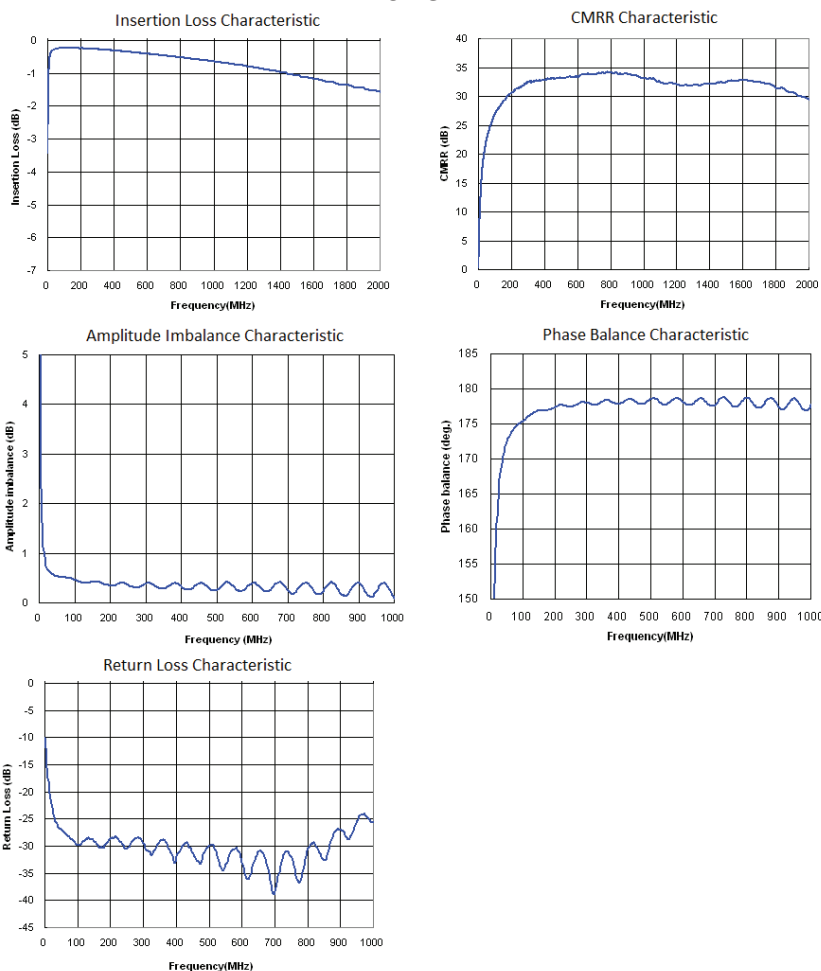
**Operating Temperature: -40°C to +85°C**

**Storage Temperature: -10°C to +40°C, 70% RH max. in tape and reel**

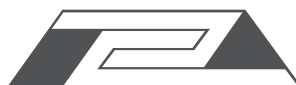
Part Number	Frequency Range (MHz)	Unbalance /Balance Impedance (ohm)	DC Resistance ( $\Omega$ ) Max	Rated Current (mA) Max	Insertion Loss max (dB)	CMRR min (dB)	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance Min. (M $\Omega$ )
ABT-8-75-1	45~870	75/75	0.80	200	1.0	20	50	125	10
ABT-8-50-1	45~870	50/50	0.80	200	1.2	20	50	125	10
ABT-8-75-2	50~1200	75/75	0.40	300	1.5	20	50	125	10
ABT-8-75-3	1000~1500	75/75	0.42	290	1.4	20	50	125	10

## ELECTRICAL CHARACTERISTIC CURVES

### ABT-8-75-1



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ISO9001:2008  
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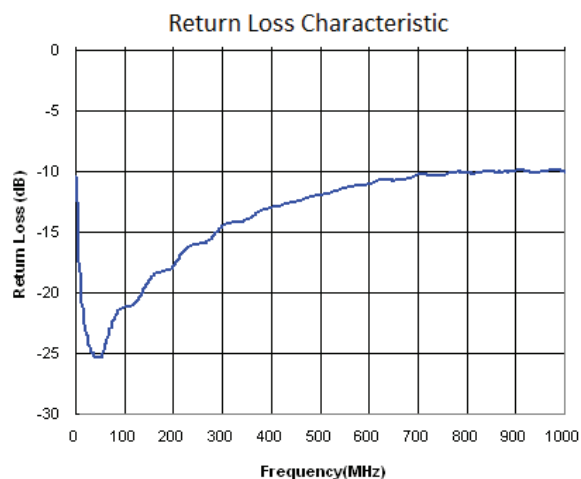
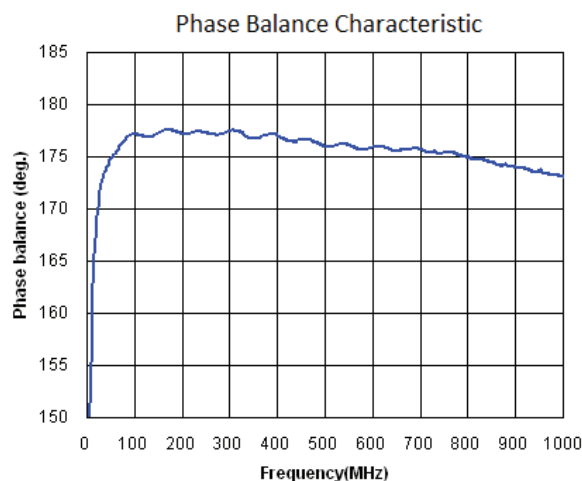
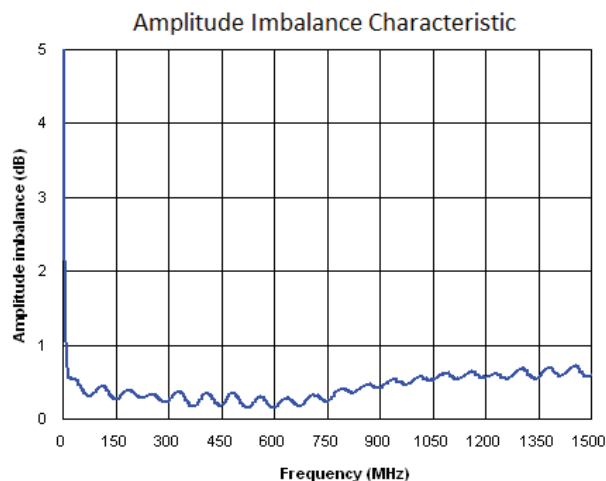
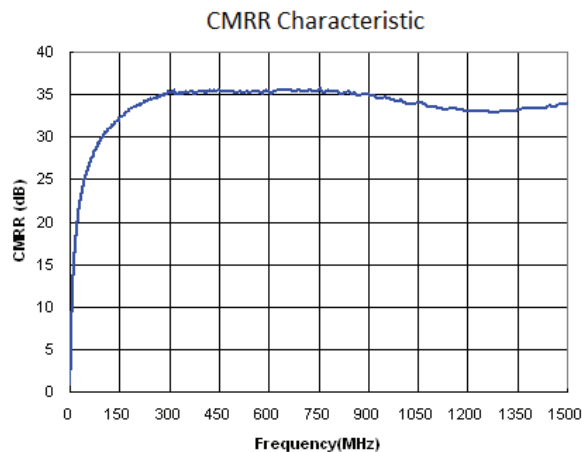
RoHS / RoHS II Compliant



2.0 x 1.2 x 1.2mm

## ELECTRICAL CHARACTERISTIC CURVES

ABT-8-50-1



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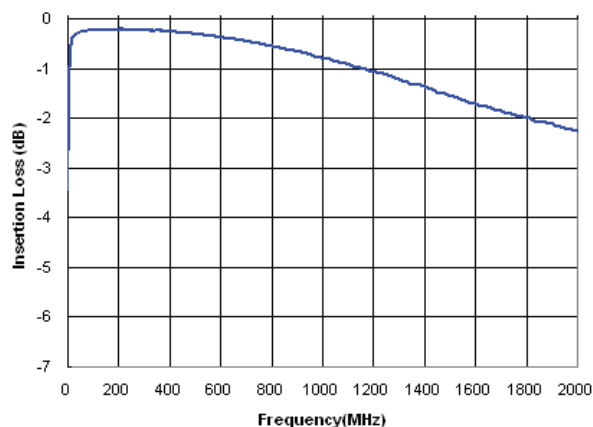


2.0 x 1.2 x 1.2mm

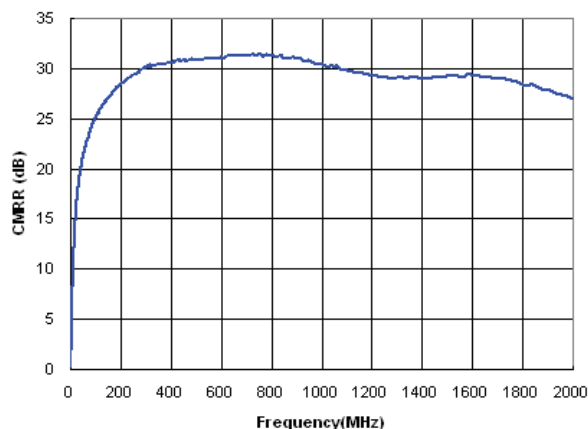
## ELECTRICAL CHARACTERISTIC CURVES

ABT-8-75-2

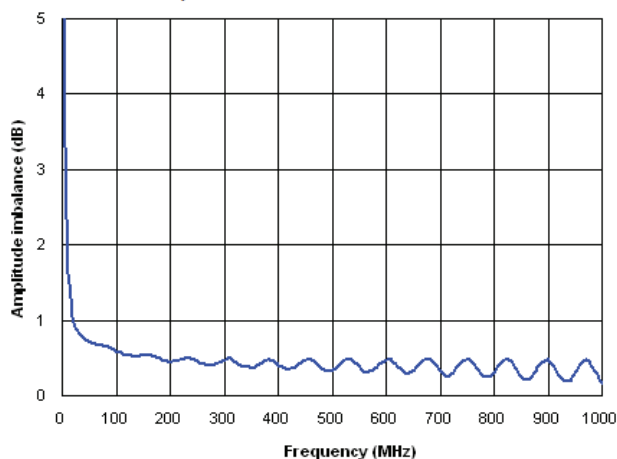
Insertion Loss Characteristic



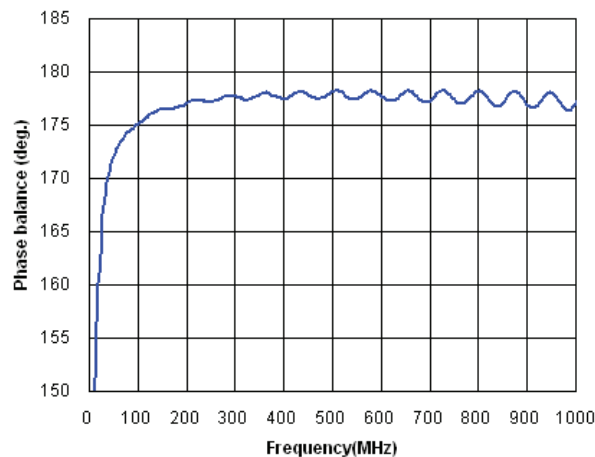
CMRR Characteristic



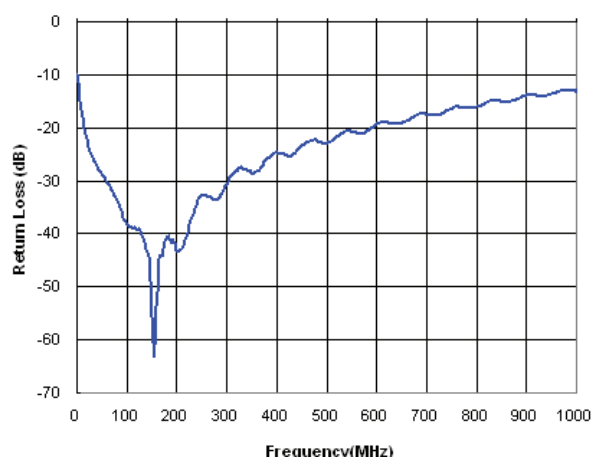
Amplitude Imbalance Characteristic



Phase Balance Characteristic



Return Loss Characteristic



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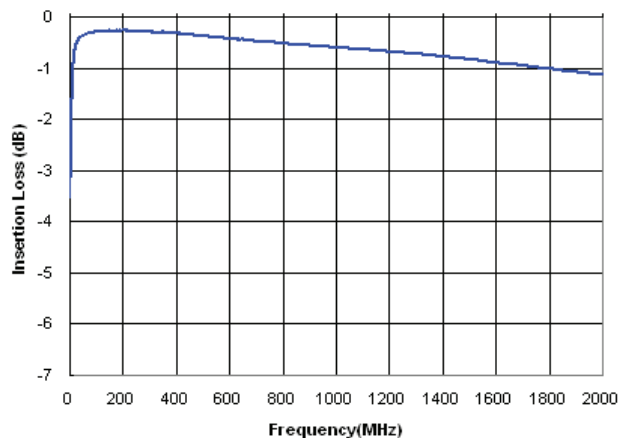


2.0 x 1.2 x 1.2mm

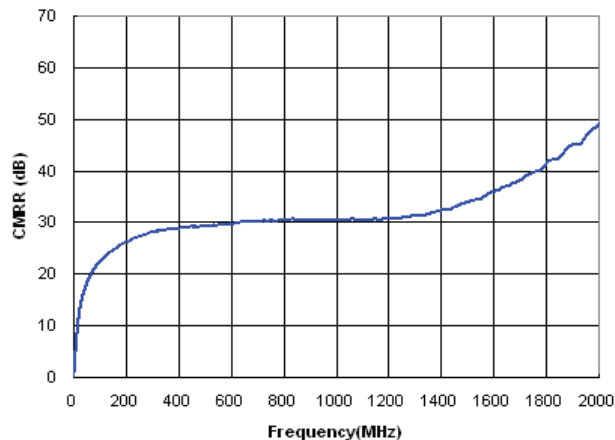
## ELECTRICAL CHARACTERISTIC CURVES

ABT-8-75-3

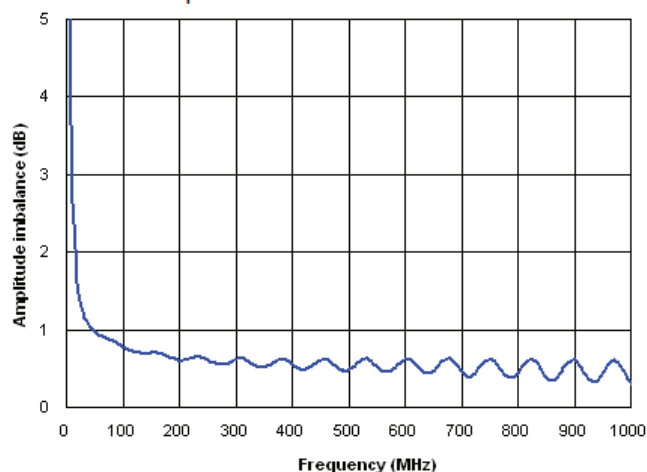
Insertion Loss Characteristic



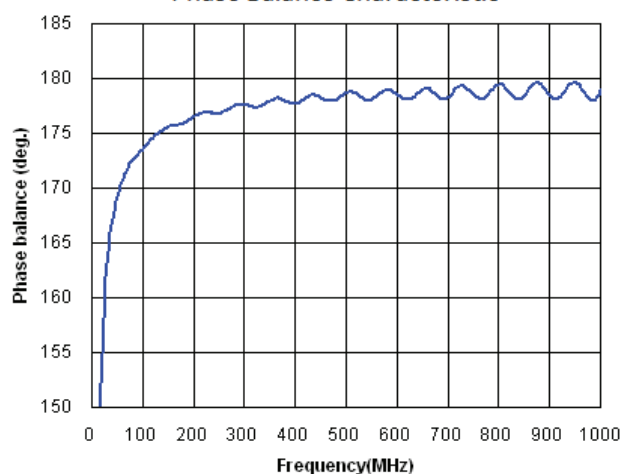
CMRR Characteristic



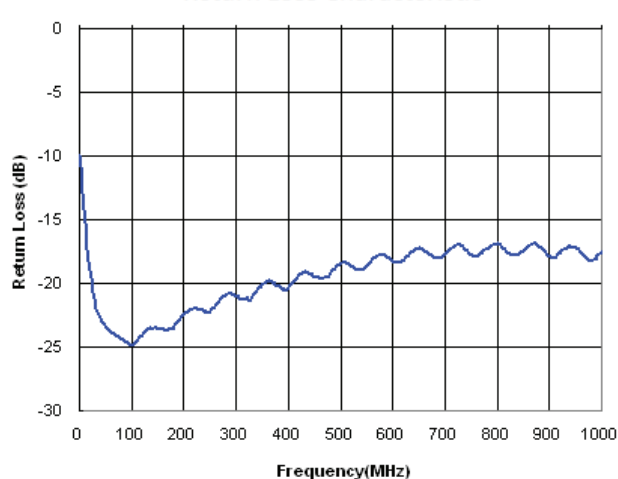
Amplitude Imbalance Characteristic



Phase Balance Characteristic



Return Loss Characteristic



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2.0 x 1.2 x 1.2mm

## PART IDENTIFICATION:

ABT-8- - - 

### Impedance Code

Please refer to Electrical Spec Table

### Frequency Range Code

Please refer to Electrical Spec Table

### Packaging

T: 2kpcs/reel

## OUTLINE DIMENSIONS:

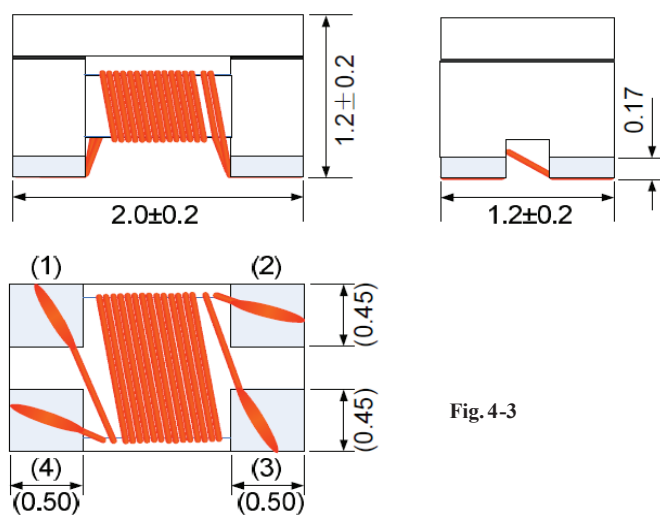
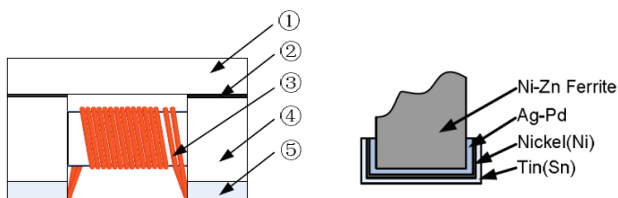
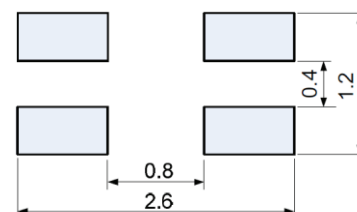


Fig. 4-3

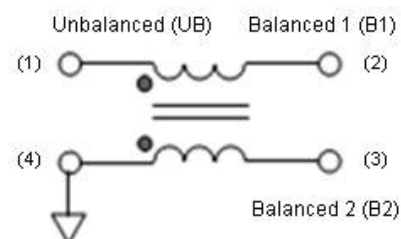
### Material Structure



### Recommended Land Pattern



### Schematic



No.	Part Name	Material Name
①	Lid	Ni-Zn Ferrite
②	Epoxy	Epoxy resin
③	Wire	Polyurethane system enameled copper wire
④	Core	Ni-Zn Ferrite
⑤	Electrode	(Ag-Pd)+Ni+Sn plating

Dimension: mm

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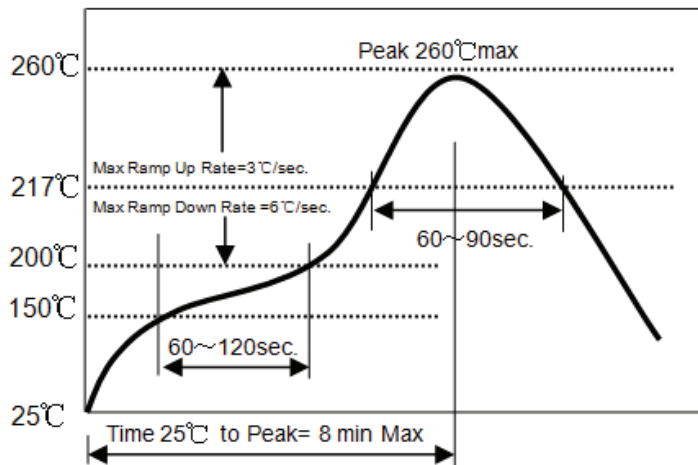


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2.0 x 1.2 x 1.2mm

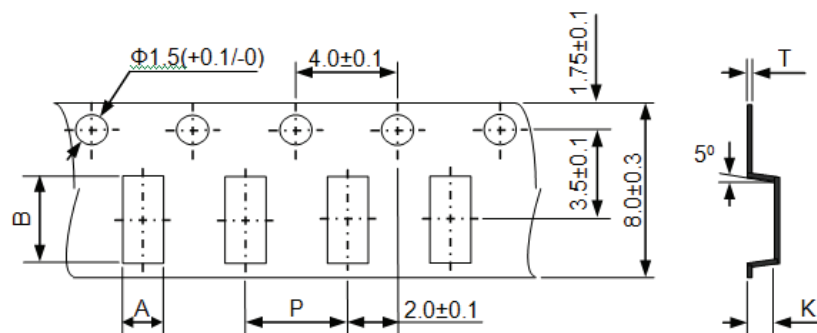
## REFLOW PROFILE:



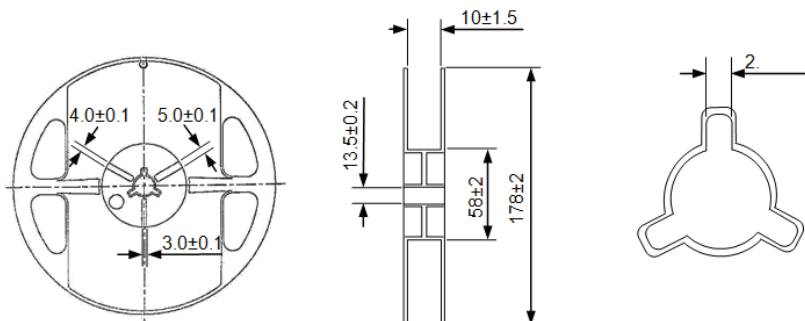
- △ Preheat condition: 150~200°C/60~120sec.
- △ Allowed time above 217°C: 60~90sec.
- △ Max temp: 260°C
- △ Max time at max temp: 10sec.
- △ Solder paste: Sn/3.0Ag/0.5Cu
- △ Allowed Reflow time: 2 times max.

## TAPE & REEL:

T= tape and reel (2,000pcs/reel)



A	B	P	K	T
1.55±0.2	2.25±0.2	4.0±0.1	1.45±0.1	0.2±0.1



Dimension: mm

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