

Wound Chip Baluns

ATB Series

Type: **ATB2012-50011 (2.0×1.2×1.2mm)**
 ATB2012-75011 (2.0×1.2×1.2mm)
 ATB2012E-50011M (2.0×1.2×1.0mm)
 ATB2012E-75011M (2.0×1.2×1.0mm)

Issue date: November 2012

- All specifications are subject to change without notice.
- Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

Wound Chip Baluns

Conformity to RoHS Directive

ATB Series ATB2012-50011

FEATURES

- ATB2012-50011 is chip BALUN transformer developed for 50Ω impedance system.
- Input impedance is 50Ω.
- Impedance ration is 1:1.
- Frequency band width is 40MHz to 860MHz.(IL=1.0dB typ.)
- It is a product conforming to RoHS directive.

APPLICATIONS

- Tuner for TV, mobile devices(e.g. DVB-T/H, ISDB-T)
- Power divider for STB and tuner

PRODUCT IDENTIFICATION

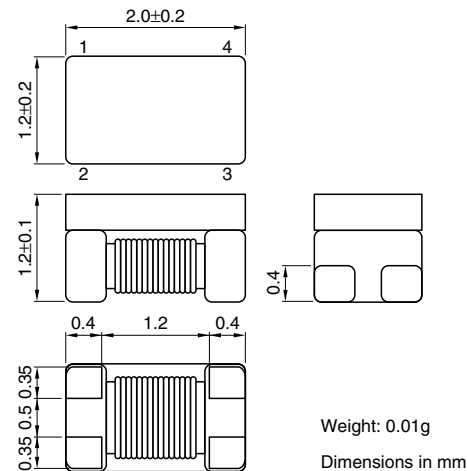
ATB	2012	-	500	-	11	-	T	□□
(1)	(2)		(3)		(4)		(5)	(6)

- (1) Series name
 (2) Case size
 (3) Input impedance
 500: 50Ω
 (4) Impedance ratio
 11: 1:1
 (5) Packing style
 T: Taping ø180mm reel
 TL: Taping ø330mm reel
 (6) Control mark

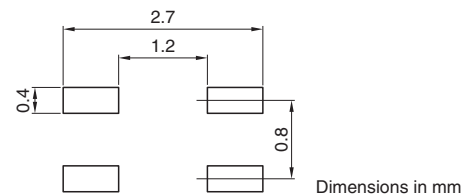
PACKAGING STYLE AND QUANTITIES

Packaging style	Reel	Quantity
Taping	ø180mm	2000 pieces/reel
	ø330mm	10000 pieces/reel

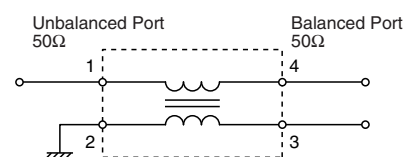
SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



CIRCUIT DIAGRAM

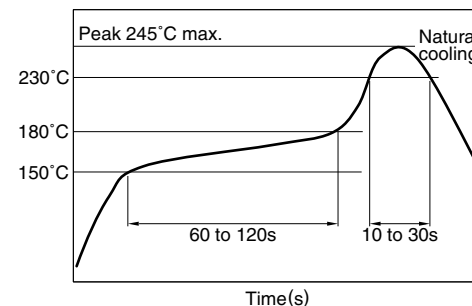


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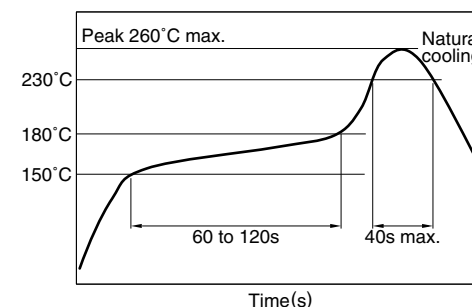
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RECOMMENDED SOLDERING CONDITIONS

RECOMMENDED TEMPERATURE PROFILE FOR LEAD-FREE SOLDER



REFLOW PROFILE FOR SOLDER HEAT RESISTANCE

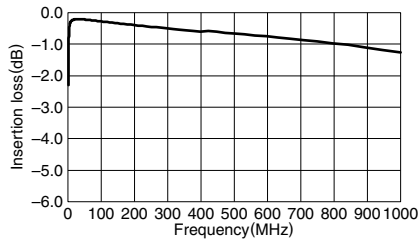


ELECTRICAL CHARACTERISTICS

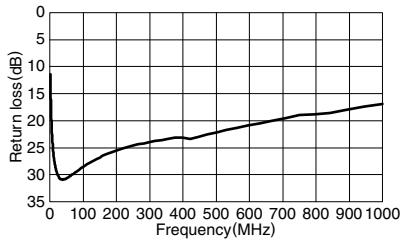
Part No.	Frequency range (MHz)	UB/B Impedance (Ω)	Insertion loss (dB)		CMRR min.	DC resistance (Ω)max.	Rated current (mA)	Rated voltage (V)	Insulation resistance (MΩ)	Withstanding voltage (V)
			typ.	max.						
ATB2012-50011-T000	40 to 860	50/50	1.0	2.5	20	1.0	200	20	10	125

FREQUENCY CHARACTERISTICS

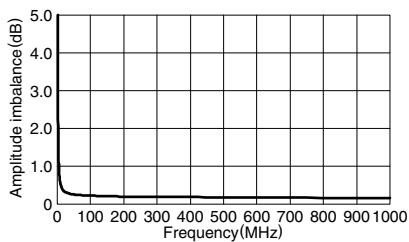
INSERTION LOSS



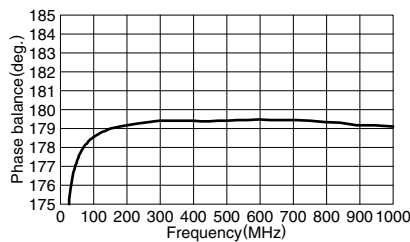
RETURN LOSS



AMPLITUDE IMBALANCE



PHASE BALANCE



• All specifications are subject to change without notice.

Wound Chip Baluns

Conformity to RoHS Directive

ATB Series ATB2012-75011

FEATURES

- ATB2012-75011 is chip BALUN transformer developed for 75Ω impedance system.
- Input impedance is 75Ω.
- Impedance ration is 1:1.
- Frequency band width is 50MHz to 1.2GHz.(IL=1.2dB typ.)
- It is a product conforming to RoHS directive.

APPLICATIONS

- Tuner for TV, mobile devices(e.g. DVB-T/H, ISDB-T)
- Power divider for STB and tuner

PRODUCT IDENTIFICATION

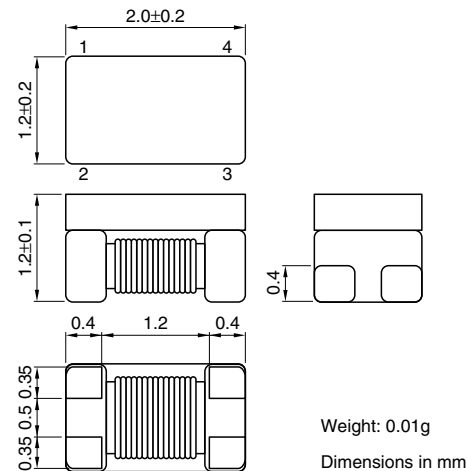
ATB	2012	-	750	-	11	-	T	
(1)	(2)		(3)		(4)		(5)	(6)

- (1) Series name
 (2) Case size
 (3) Input impedance
 750: 75Ω
 (4) Impedance ratio
 11: 1:1
 (5) Packing style
 T: Taping ø180mm reel
 TL: Taping ø330mm reel
 (6) Control mark

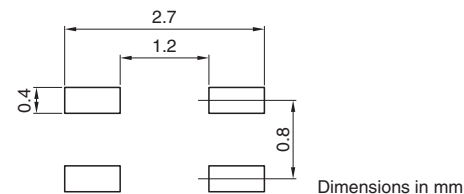
PACKAGING STYLE AND QUANTITIES

Packaging style	Reel	Quantity
Taping	ø180mm	2000 pieces/reel
	ø330mm	10000 pieces/reel

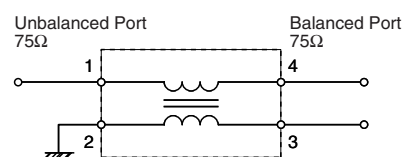
SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



CIRCUIT DIAGRAM

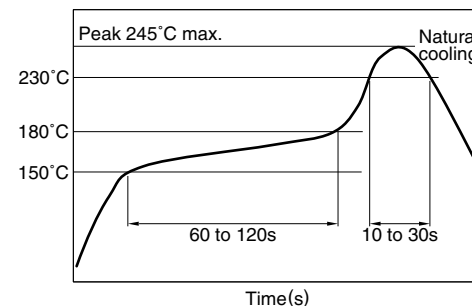


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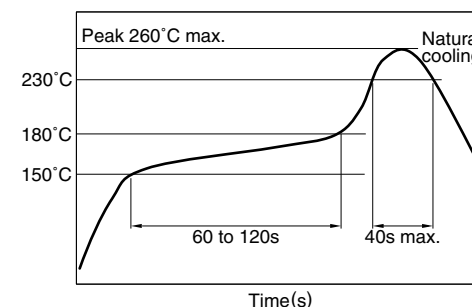
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RECOMMENDED SOLDERING CONDITIONS

RECOMMENDED TEMPERATURE PROFILE FOR LEAD-FREE SOLDER



REFLOW PROFILE FOR SOLDER HEAT RESISTANCE

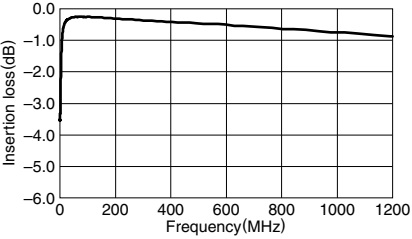


ELECTRICAL CHARACTERISTICS

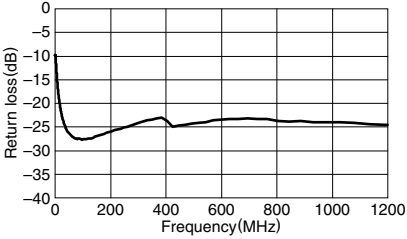
Part No.	Frequency range (MHz)	UB/B Impedance (Ω)	Insertion loss (dB) max.	CMRR min.	DC resistance (Ω)	Rated current (mA)	Rated voltage (V)	Insulation resistance (M Ω)	Withstanding voltage (V)
ATB2012-75011-T000	50 to 1200	75/75	1.2	20	0.7	280	20	10	125

FREQUENCY CHARACTERISTICS

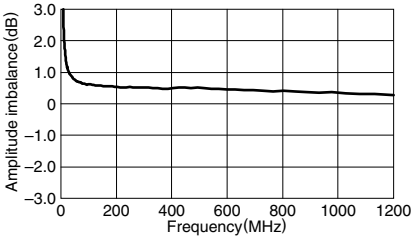
INSERTION LOSS



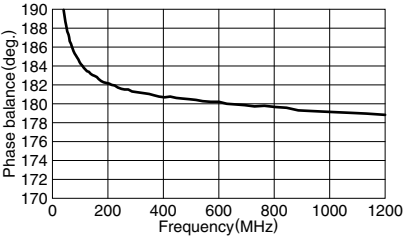
RETURN LOSS



AMPLITUDE IMBALANCE



PHASE BALANCE



Wound Chip Baluns

Conformity to RoHS Directive

ATB Series ATB2012E-50011M

FEATURES

- ATB2012E-50011M is chip BALUN transformer developed for 50Ω impedance system.
- Input impedance is 50Ω.
- Impedance ration is 1:1.
- Frequency band width is 400MHz to 1.8GHz.(IL=1.0dB typ.)
- It is a product conforming to RoHS directive.

APPLICATIONS

- Tuner for TV, mobile devices(e.g. DVB-T/H, ISDB-T)
- Power divider for STB and tuner

PRODUCT IDENTIFICATION

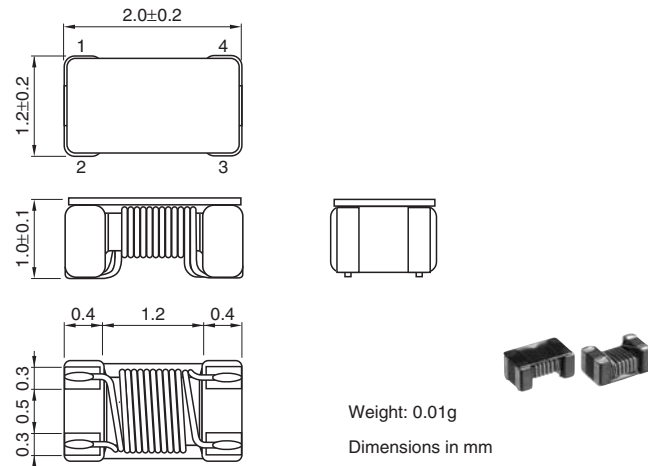
ATB	2012E	- 500	11	M	- T	
(1)	(2)	(3)	(4)	(5)	(6)	(7)

- (1) Series name
 (2) Case size
 (3) Input impedance
 500: 50Ω
 (4) Impedance ratio
 11: 1:1
 (5) Product identification
 (6) Packaging style
 T: Taping ø180mm reel
 TL: Taping ø330mm reel
 (7) Control mark

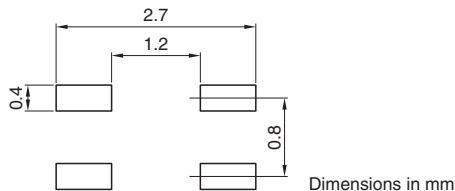
PACKAGING STYLE AND QUANTITIES

Packaging style	Reel	Quantity
Taping	ø180mm	2000 pieces/reel
	ø330mm	10000 pieces/reel

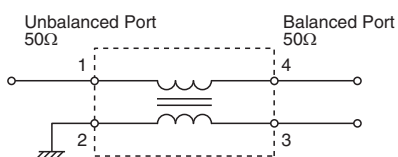
SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



CIRCUIT DIAGRAM

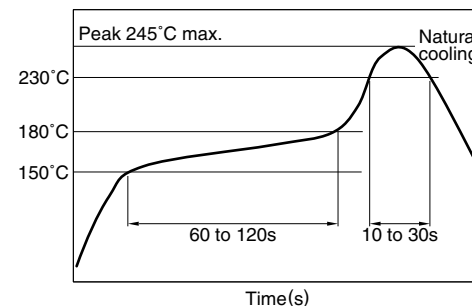


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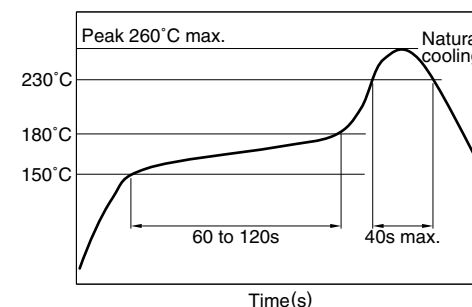
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RECOMMENDED SOLDERING CONDITIONS

RECOMMENDED TEMPERATURE PROFILE FOR LEAD-FREE SOLDER



REFLOW PROFILE FOR SOLDER HEAT RESISTANCE

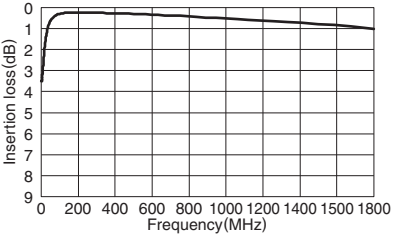


ELECTRICAL CHARACTERISTICS

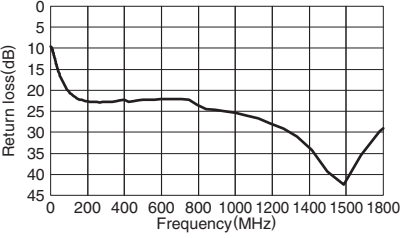
Part No.	Frequency range (MHz)	UB/B Impedance (Ω)	Insertion loss [1.8GHz] (dB)		CMRR min.	DC resistance (Ω)max.	Rated current (mA)	Rated voltage (V)	Insulation resistance (M Ω)	Withstanding voltage (V)
			typ.	max.						
ATB2012E-50011M-T00	400 to 1800	50/50	1.0	2.2	15	0.5	150	20	10	125

FREQUENCY CHARACTERISTICS

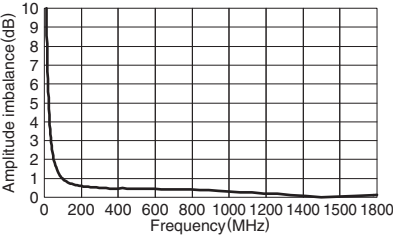
INSERTION LOSS



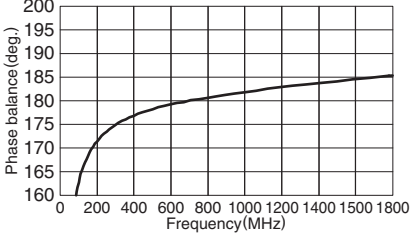
RETURN LOSS



AMPLITUDE IMBALANCE



PHASE BALANCE



Wound Chip Baluns

Conformity to RoHS Directive

ATB Series ATB2012E-75011M

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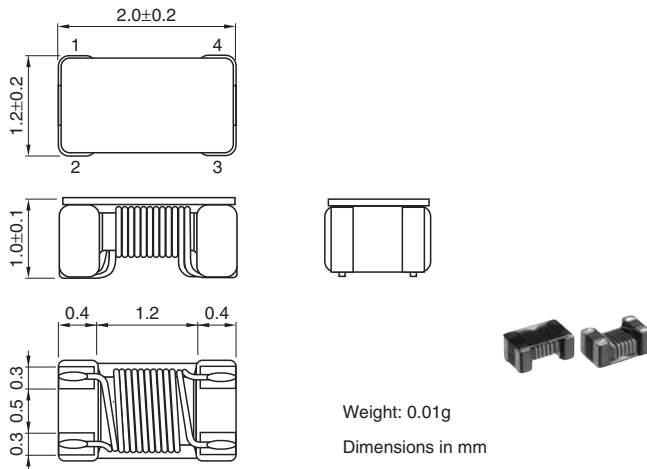
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 (7) Control mark

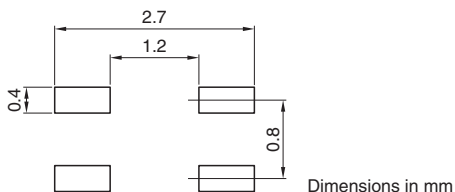
PACKAGING STYLE AND QUANTITIES

Packaging style	Reel	Quantity
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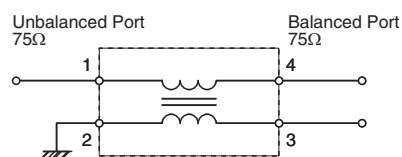
SHAPES AND DIMENSIONS



RECOMMENDED PC BOARD PATTERN



CIRCUIT DIAGRAM

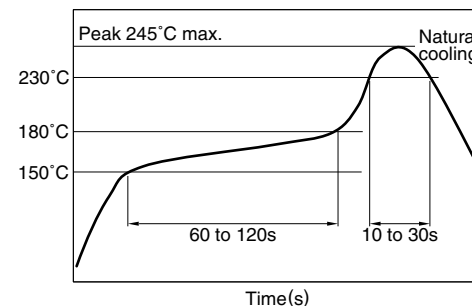


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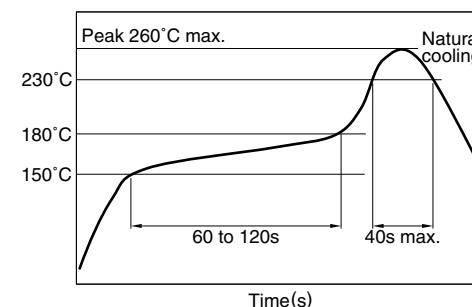
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RECOMMENDED SOLDERING CONDITIONS

RECOMMENDED TEMPERATURE PROFILE FOR LEAD-FREE SOLDER



REFLOW PROFILE FOR SOLDER HEAT RESISTANCE

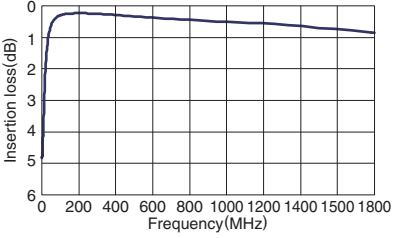


ELECTRICAL CHARACTERISTICS

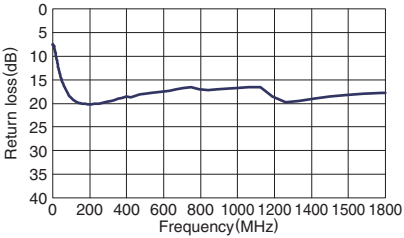
Part No.	Frequency range (MHz)	UB/B impedance (Ω)	Insertion loss [1.8GHz] (dB)		CMRR min.	DC resistance (Ω)max.	Rated current (mA)	Rated voltage (V)	Insulation resistance (M Ω)	Withstanding voltage (V)
			typ.	max.						
ATB2012E-75011M-T00	400 to 1800	75/75	1.0	2	15	0.5	150	20	10	125

FREQUENCY CHARACTERISTICS

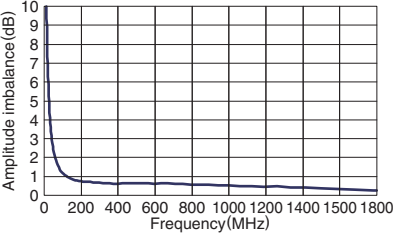
INSERTION LOSS



RETURN LOSS



AMPLITUDE IMBALANCE



PHASE BALANCE

