



**THE DATASHEET OF
2450FB15L0001E**



"High Frequency Ceramic Solutions"

2.45 GHz Harmonic Filter-Balun Optimized for AT86RF230/231 and ATmega128RFA1 P/N 2450FB15L0001

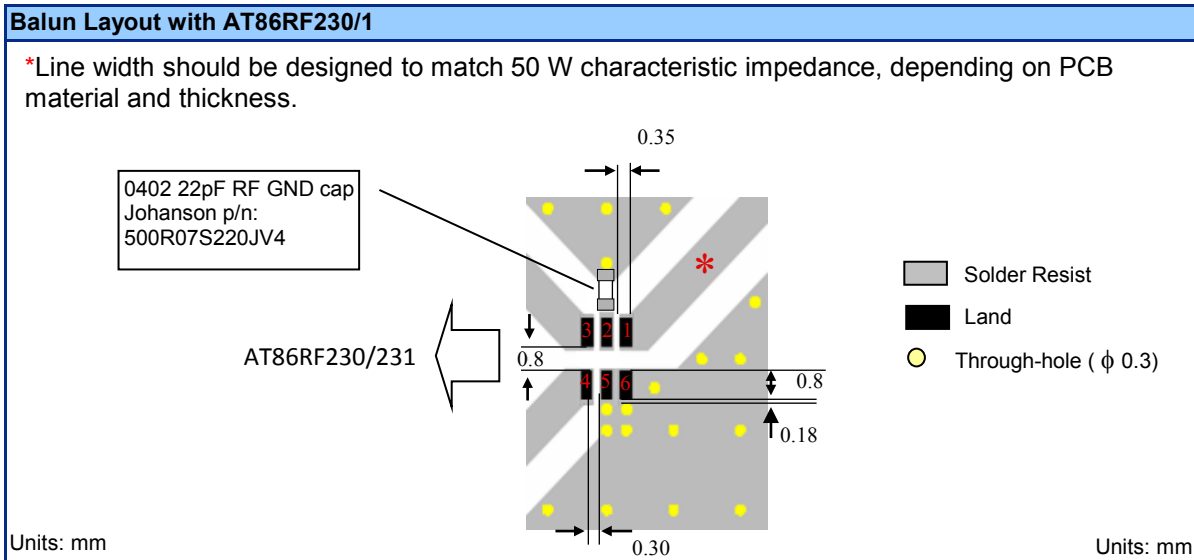
Detail Specification: 11/10/2014

Page 1 of 5

General Specifications			
Part Number	2450FB15L0001	Differential Mode Attenuation (dB)	20 min.@ 4800~5000MHz 20 min.@ 7200~7500MHz
Frequency (MHz)	2400~2500	Common Mode Attenuation (dB)	20 min.@ 4800~5000MHz
Unbalanced Impedance	50 Ω		
Balanced Impedance	Impedance match to AT86RF230/231 and ATmega128RFA1	Operating Temperature	-40°C to +125°C
Insertion Loss	1.5 dB max.	Storage Conditions	+5 to +35°C, Humidity: 45-75%RH, 18 mos. Max
Return Loss	9.5 dB min.		
Phase Difference	180° ± 10	Input Power	2 Watts max. (CW)
Amplitude Difference	2.0 dB max.	Reel Quantity	4,000

* 18 months in vacuum sealed bag and 1 week after opened. For more info go to www.johansontechnology.com/silverleads

Mechanical Dimensions			Terminal Configuration			
	In	mm	No.	Function	No.	Function
L	0.079 ± 0.004	2.00 ± 0.10	1	Unbalanced Port	4	Balanced Port
W	0.049 ± 0.004	1.25 ± 0.10	2	DC Feed + RF GND	5	GND
T	0.031 ± 0.004	0.80 ± 0.10	3	Balanced Port	6	GND
a	0.012 ± 0.004	0.30 ± 0.10				
b	0.008 ± 0.004	0.20 ± 0.10				
c	0.012 +.004/-0.008	0.30 +0.1/-0.2				
g	0.014 ± 0.004	0.35 ± 0.10				
p	0.026 ± 0.002	0.65 ± 0.05				

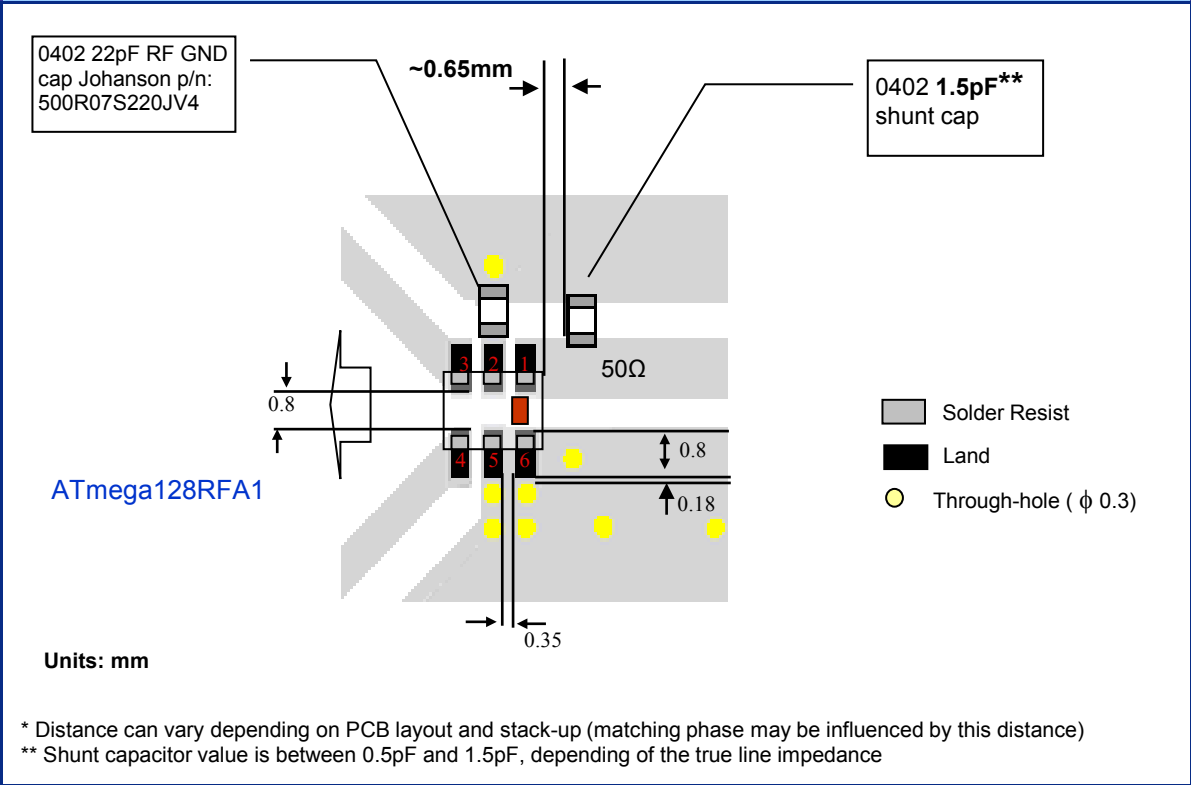


Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.

"High Frequency Ceramic Solutions"

2.45 GHz Harmonic Filter-Balun Optimized for AT86RF230/231 and ATmega128RFA1 P/N 2450FB15L0001
 Detail Specification: 11/10/2014 Page 2 of 5

Balun Layout with ATmega128RFA1



Part Numbering Scheme

P/N Suffix	Packaging Style	Bulk	Suffix = S	Eg. 2450FB15L0001S
		T & R	Suffix = E	Eg. 2450FB15L0001E
	Termination Style	AgPt	Suffix = None	Eg. 2450FB15L0001(E or S)
	Evaluation Board	2450FB15L0001-EB1SMA		

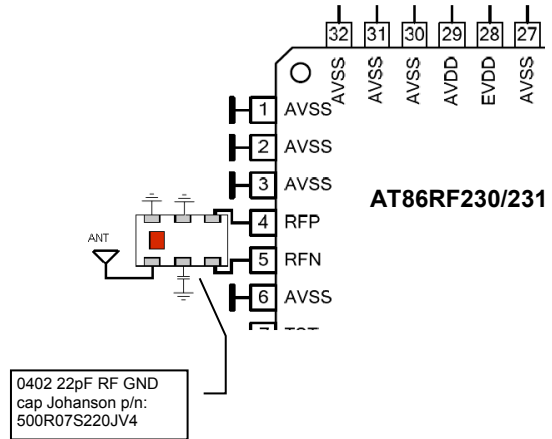
Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.



"High Frequency Ceramic Solutions"

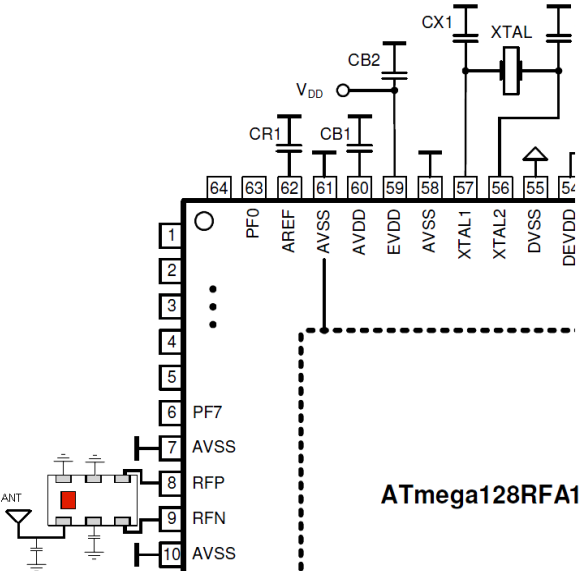
2.45 GHz Harmonic Filter-Balun Optimized for AT86RF230/231 and ATmega128RFA1 P/N 2450FB15L0001
 Detail Specification: 11/10/2014 Page 3 of 5

AT86RF230/231 With DC feed graphical representation:



See last page for filtering performance

ATmega128RFA1 With DC feed graphical representation:



See last page for filtering performance

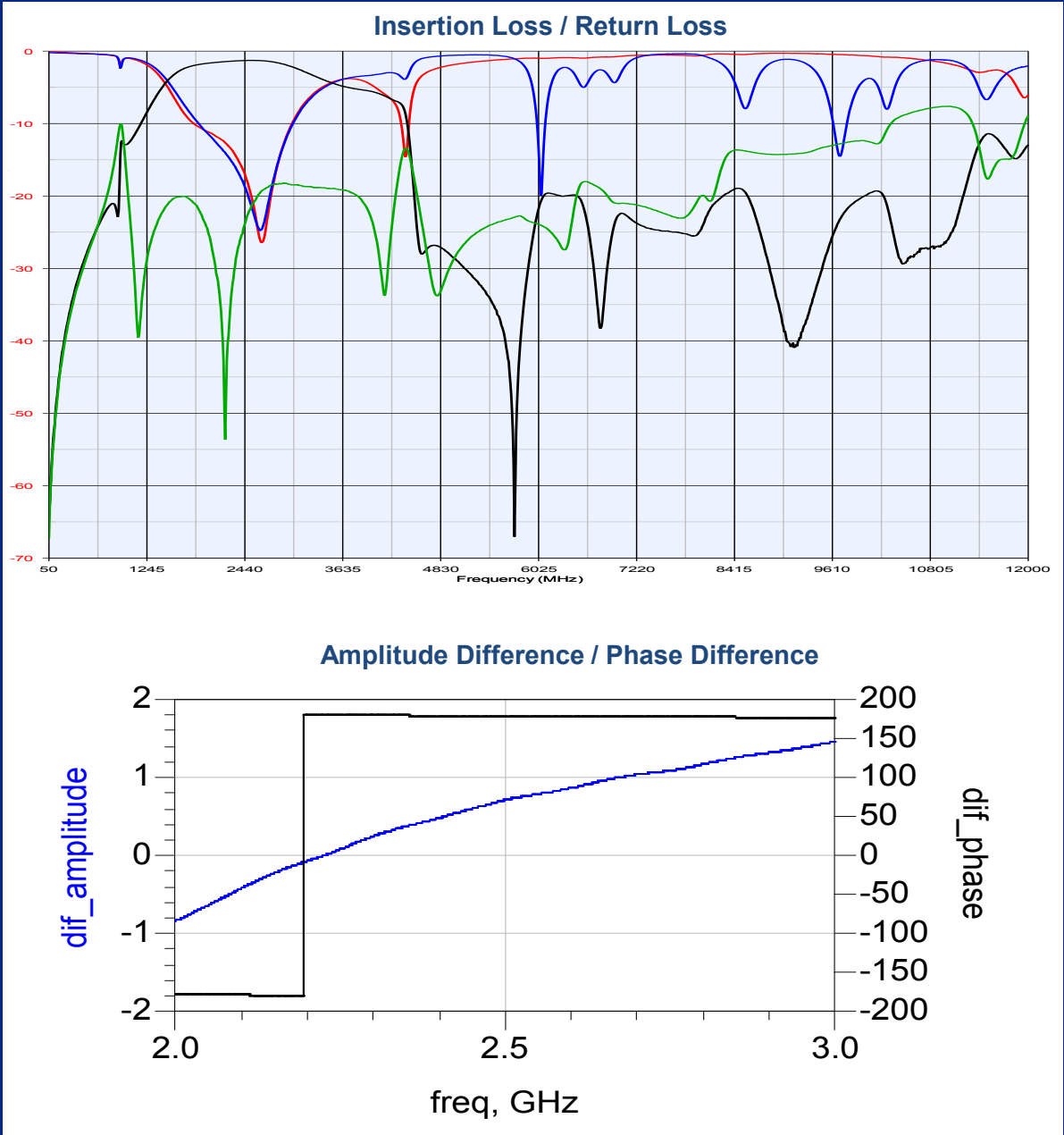
Johanson Technology, Inc. reserves the right to make design changes without notice.
 All sales are subject to Johanson Technology, Inc. terms and conditions.



"High Frequency Ceramic Solutions"

2.45 GHz Harmonic Filter-Balun Optimized for AT86RF230/231 and ATmega128RFA1 P/N 2450FB15L0001
Detail Specification: 11/10/2014 Page 4 of 5

AT86RF230/231 With DC feed graphical representation:



Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver. 7.0

2014 Johanson Technology, Inc. All Rights Reserved

"High Frequency Ceramic Solutions"

2.45 GHz Harmonic Filter-Balun Optimized for AT86RF230/231 and ATmega128RFA1 P/N 2450FB15L0001

Detail Specification: 11/10/2014

Page 5 of 5

RoHS Compliance

www.johansontechnology.com/technical-notes/rohs-compliance.html

Packaging information

www.johansontechnology.com/ipcpackaging.html

Soldering Information

www.johansontechnology.com/ipcsoldering-profile

Antenna layout and tuning techniques

www.johansontechnology.com/tuning

Antenna layout review, tuning, and characterization services

www.johansontechnology.com/ipcantennaservices

Pad metalization information

www.johansontechnology.com/silverleads

MSL Info

www.johansontechnology.com/technical-notes/msl-rating.html

Recommended Storage Condition and Max Shelf Life

www.johansontechnology.com/ipcstorage-shelflife

Application Notes, Layout Files, and more

www.johansontechnology.com/atmel

Johanson Technology, Inc. reserves the right to make design changes without notice.
All sales are subject to Johanson Technology, Inc. terms and conditions.



www.johansontechnology.com
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

Ver. 7.0

2014 Johanson Technology, Inc. All Rights Reserved

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View 2450FB15L0001E on WIN SOURCE](#)
-  [Johanson Technology Inc. Information](#)

Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management