

Impedance-Matched Highly Integrated Ceramic Passive Component for Atheros Qualcomm AR6004 Chipset

P/N 2450PC14A0017

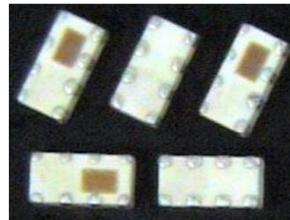
Detail Specification: 08/07/12

Page 1 of 3

General Specifications

Part Number	2450PC14A0017	
Frequency	2400 ~ 2500	5150 ~ 5850
Insertion Loss	3.8 dB max.	2.6 dB max.
Unbalanced Impedance	50 Ω	50 Ω
Balanced Impedance	Conjugate match to AR6004 _Rx BGA	
Phase Diff. (degree)	180 $\pm$ 15	-135 $\pm$ 20 @ 5.15GHz 165 $\pm$ 20 @ 5.85GHz
Amp. Diff.	-1.5 $\pm$ 2.0	0 $\pm$ 2 @ 5.15GHz -4.0 $\pm$ 2 @ 5.85GHz

Reel Quantity	4,000
Operating Temperature	-40 to +85°C
Recommended Storage Conditions	+5 ~ +35°C, Humidity: 45~75%RH, 18 mos. Max
Power Capacity	2W max.

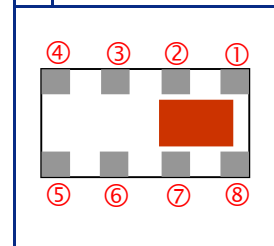
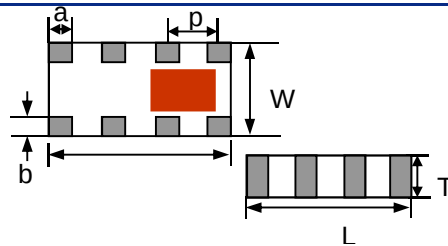


Terminal Configuration

No.	Function
1	GND
2	Rx5
3	GND
4	Rx2
5	Rx2_a
6	Rx2_b
7	Rx5_a
8	Rx5_b

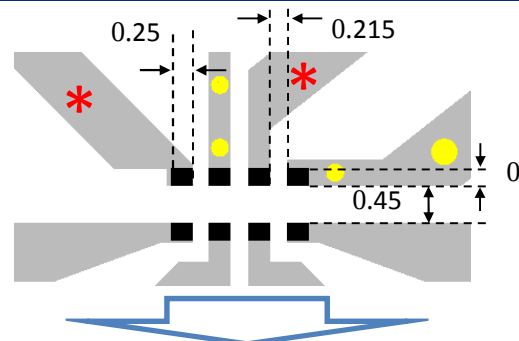
Mechanical Dimensions

	In	mm
L	0.063 $\pm$ 0.004	1.60 $\pm$ 0.10
W	0.031 $\pm$ 0.004	0.80 $\pm$ 0.10
T	0.039 max.	0.7 max.
a	0.008 +.004/-0.006	0.20 +0.1/-0.05
b	0.006 +.004/-0.006	0.15 +0.1/-0.05
p	0.020 $\pm$ 0.004	0.50 $\pm$ 0.10



Mounting Considerations

* Line width should be designed to provide 50 ohm impedance, depending on PCB material and thickness



- Solder
- Land
- Through-hole
(ϕ 0.2 / 0.3)

AR6004

Units: mm

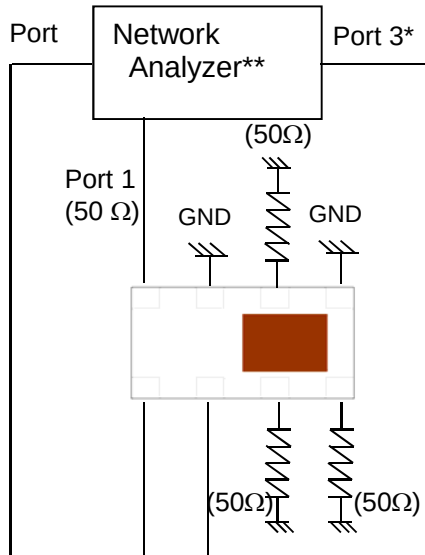
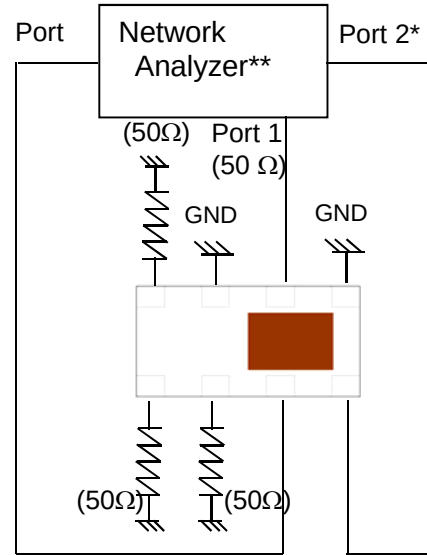
Johanson Technology, Inc. reserves the right to make design changes without notice.

All sales are subject to Johanson Technology, Inc. terms and conditions.

Impedance-Matched Highly Integrated Ceramic Passive Component for Atheros Qualcomm AR6004 Chipset**P/N 2450PC14A0017**

Detail Specification: 08/07/12

Page 2 of 3

Circuit Application**Rx2****Rx5**

Port 1: Unbalanced Port

Ports 2 and 3: Balanced Port

 $IL = S_{ds21}$ $RL = S_{ss11}$ $Amp_balance = dB(S(2,1)/S(3,1))$ $Phase_balance = Phase(S(2,1)/S(3,1))$

*Impedance for ports 2 and 3 = Conjugate to Balanced Impedance/2

**E5071B / C from Agilent

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

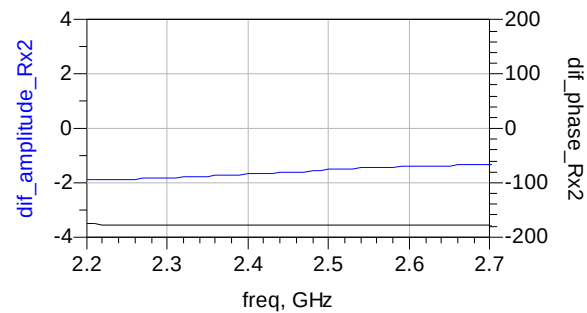
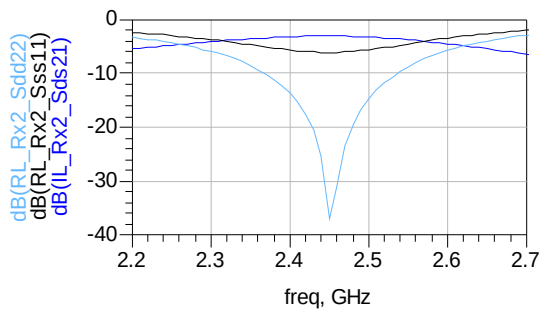
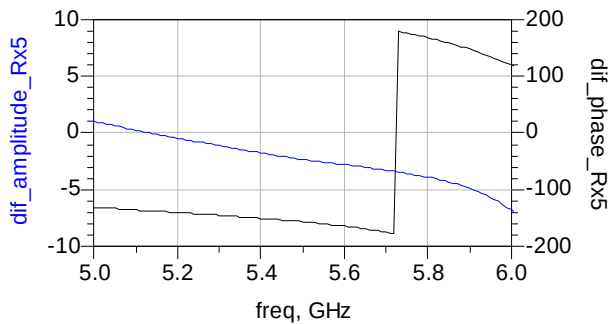
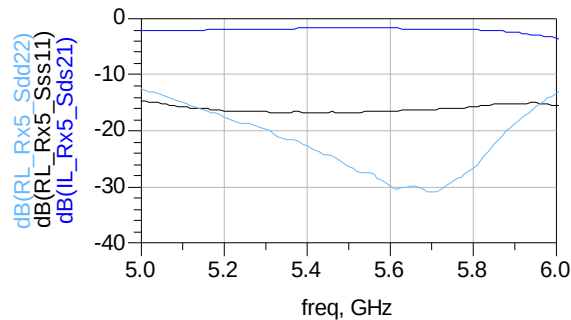
4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

2012 Johanson Technology, Inc. All Rights Reserved

**Impedance-Matched Highly Integrated Ceramic Passive
Component for Atheros Qualcomm AR6004 Chipset****P/N 2450PC14A0017**

Detail Specification: 08/07/12

Page 3 of 3

Typical Electrical Performance (T=25°C)**Insertion & Return Loss****Amplitude & Phase Balance****2.4GHz Band Path****5GHz Band Path**

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



4001 Calle Tecate • Camarillo, CA 93012 • TEL 805.389.1166 FAX 805.389.1821

www.johansontechnology.com

2012 Johanson Technology, Inc. All Rights Reserved

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Johanson:](#)

[2450PC14A0017T](#) [2450PC14A0017001T](#)