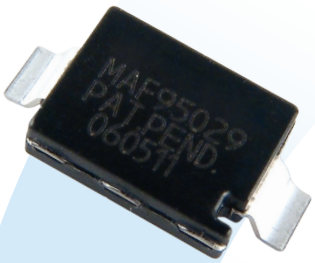
Laird TECHNOLOGIES

Innovative **Technology**
for a **Connected** World

Black Chip
Internal Surface Mount Antenna



The evolution of technology has brought the need to communicate everywhere and at all times without being confined to one space. Laird Technologies' internal wireless device antennas feature wide bandwidth to enhance the performance and application of portable wireless devices based on standards such as 802.11 and Bluetooth®. The antennas are specifically designed to be embedded inside devices for aesthetically pleasing integration with high durability.

FEATURES RoHS

- Small and lightweight
- Wide bandwidth, ultra-wide band capable
- Available in tape and reel packaging
- SMT compatible including lead free processes
- Conformance to European RoHS directive 2002/95/EC

MARKETS

- WiMAX

global solutions: local support™

Americas: +1.847 839.6907
IAS-AmericasEastSales@lairdtech.com

Europe: +1.32.80.7866.12
IAS-EUSales@lairdtech.com

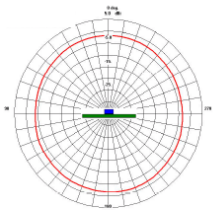
Asia: +1.65.6.243.8022
IAS-AsiaSales@lairdtech.com

www.lairdtech.com

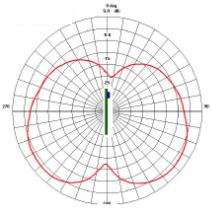
Innovative **Technology** for a **Connected** World

Black Chip
Internal Surface Mount Antenna

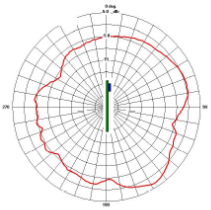
SPECIFICATIONS		
Frequency range	2.4 – 2.5 GHz	4.9 – 6.0 GHz
Peak gain	> 2 dBi	> 3 dBi
Polarization	Linear	
Nominal impedance	50 ohms	
SWR (min. performance)	<2.0:1	
Temperature range	-40° to +85°C	
Vibration	6G RMS (9.04 g^2/Hz) for 15 minutes each in vertical and horizontal. No appearance or functional change	
Thermal shock	Four repeated cycles of 1 hr. at +85°C and 1 hr. at -40°C. No appearance or functional change.	
Radiating element size	8 x 6 x 2.5 mm (L x W x H)	
Physical mass	0.21 grams	
Length w/ solder tabs	12 mm	



Azimuth
2.45 GHz
Free Space

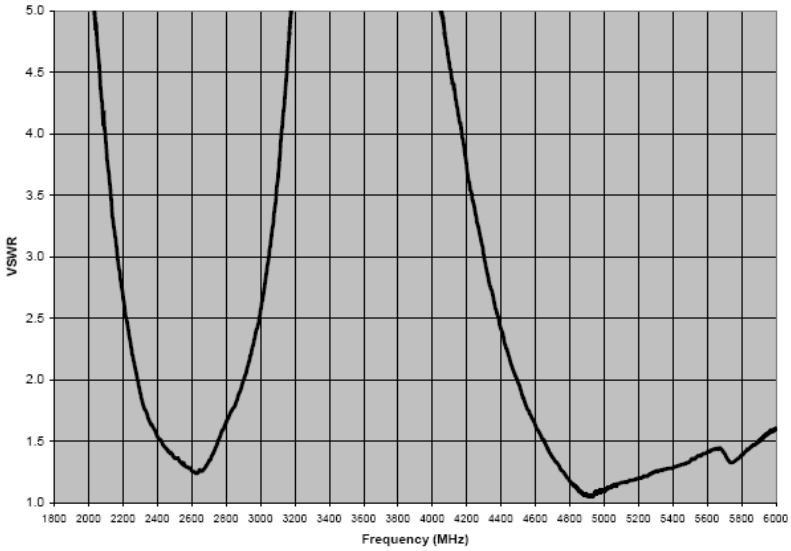


Elevation phi=0
2.45 GHz
Free Space



Elevation phi=0
5.8 GHz
Free Space

MODEL NUMBER	PART NUMBER	DESCRIPTION	CONNECTOR
WIC2452-A	MAF95029	Tape and reel	N/A
WIC2452-A-SM	MAF95032	Ultrawide-band on eval board	SMA-female edgemount



Any information furnished by Laird Technologies, Inc. and its agents is believed to be accurate and reliable. All specifications are subject to change without notice. Responsibility for the use and application of Laird Technologies materials rests with the end user, since Laird Technologies and its agents cannot be aware of all potential uses. Laird Technologies makes no warranties as to the fitness, merchantability or suitability of any Laird Technologies materials or products for any specific or general uses. Laird Technologies shall not be liable for incidental or consequential damages of any kind. All Laird Technologies products are sold pursuant to the Laird Technologies' Terms and Conditions of sale in effect from time to time, a copy of which will be furnished upon request. © Copyright 2011 Laird Technologies, Inc. All Rights Reserved. Laird, Laird Technologies, the Laird Technologies Logo, and other marks are trade marks or registered trade marks of Laird Technologies, Inc. or an affiliate company thereof. Other product or service names may be the property of third parties. Nothing herein provides a license under any Laird Technologies or any third party intellectual property rights.