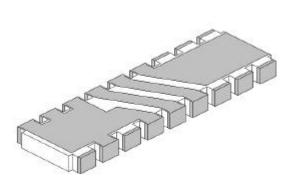
Surface Mountable Dielectric Chip Antennas AHD1403-244ST Series

1. Features

We have developed high performance dielectric chip antennas suitable for mobile information devices, especially suitable for BluetoothTM. They are small, light weight, built-in antennas reducing the risk of antenna damage in accident. We can also make custom antennas suitable for your applications.



2. Features

- Omni-directional Radiation Patterns
- Small Sizes
- Low Profile
- Wide Frequency Band

3. Applications

PC, PDA, Mobile Phone,

4. Specifications of AHD1403-244ST01

Туре	Size	Operating Frequency	Operating Temperature	
AHD1403-244ST01	$13.5 \times 3.0 \times 0.8 \text{ mm}$ Tolerance : ±0.2mm	2400 – 2484 MHz	-25 - +85 C°	

5. Characteristics of AHD1403-244ST01 -Reference-

Bandwidth in VSWR ≤ 2	Peak Gain	Average Gain	Radiation Efficiency	
140 MHz	0 dBd	-6.6 dBd	36 %	

6. Series of center $Frequencies(f_0)$

In case of surface mount antennas, the center frequency is dependent on the PCB size or other surrounding components and materials, and therefore can be different from what is measured with our standard test board. For the AHD1403-244ST, we have therefore prepared series of items having different center frequencies with a certain frequency step, in order to cancel the above mentioned frequency shift by the environmental factors.

So with our AHD1403-244ST series, you can easily and quickly find the most suitable antenna for your own mounting conditions.

Example 1:

If you take the AHD1403-244ST**01** (nominal f_0 =2440MHz), but see that the center frequency is 2490MHz (50MHz higher) when mounted on your own board : We recommend to use AHD1403-244ST**25** (nominal f_0 =2390MHz, Δf_0 =-50MHz).

Example 2:

If you take the AHD1403-244ST**01** (nominal $f_0=2440MHz$), but see that the center frequency is 2350MHz (90MHz lower) when mounted on your own board : We recommend to use AHD1403-244ST**10** (nominal $f_0=2530MHz$, $\Delta f_0=+90MHz$).

7. Custom design

In addition to the AHD1403-244ST series, we are also doing custom designs with various sizes and frequencies. Please feel free to contact us for details.

Туре	Sizes	Operating Frequency Range	Operating Temperature	Application	Look
AHD1206-244ST01	12×6×0.64mm	2400MHz 2484MHz	-25°C +85°C	Wireless LAN Bluetooth	and the second s
APD1008-244ST01	10×8×4mm	2400MHz 2484MHz	-25°C +85°C	Wireless LAN Bluetooth	
APD1512-244ST02	15×12×2mm	2400MHz 2484MHz	-25°C +85°C	Wireless LAN Bluetooth	
APD1512-244ST01	15×12×4mm	2400MHz 2484MHz	-25°C +85°C	Wireless LAN Bluetooth	

Examples of custom products

Note:

1) The specifications given herein may be changed or modified at anytime without prior notice.

2) Please request specifications for the part your plan to use.

Contact us :

MMC ELECTRONICS AMERICA INC. - Chicago Office 1365 Wiley Road, Suite #149, Schaumburg, IL 60173 TEL:1-847-490-0222 FAX:1-847-490-0218 email: sales@mmea.com MMC ELECTRONICS AMERICA INC. - San Jose Office 45 East Plumeria Dr., San Jose, Califonia 95134 TEL:1-408-571-2001 FAX:1-408-571-209