



Specification No. AEC\_MCL\_160316\_01

Messrs : Mobile Compia

## Approval Sheet for Product Specification

Issued Date : June. 23. 2004

Product Description : SMD Type Chip Antenna

Customer Part No. : \_\_\_\_\_

AUTO Part No. : AEC MCL 001 \_\_\_\_\_

Date :
Company : <i>Mobile Compia.</i>
Dept. :
Approved by
(Signature) <i>Choi Ki Moon.</i>
(Type)

The duplicate of this specification shall be returned to us with your authorized signature. Unless it reaches us by July. 30, 2004 it shall be mutually understood that this specifications have been duly approved by you.

Technical Dept.

Prepared by

\_\_\_\_\_ *Hong Sung OK* (Signature)  
(Type)

Approved by

\_\_\_\_\_ (Signature)  
(Type)

Manager  
Product Engineering Section  
Antenna Products Department  
Auto Electronic Corp.

\_\_\_\_\_ (Company name/Dept.)

AUTO ELECTRONIC CORP.

# Specification Sheet

Object	Chip Antenna	REV.	3.0	Page	1 of 6
Model Name	AEC_MCL_001	Date		Jun. 23, 2004	
System	WLAN Module	Written by		S.O.Hong	

## Electrical Specification

Frequency	2.4 ~ 2.485(GHz)
Bandwidth	200(MHz)
V.S.W.R	1.9:1(max)
Gain (max)	0(dBi)
Input Impedance	50( $\Omega$ )
Polarization	Linear

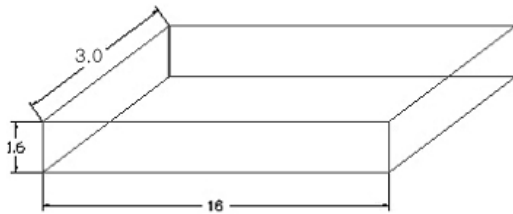
## Mechanical Specifications

Size	16×3×1.6(mm)
Weight	0.22(g)
Radiator Material	Copper
Operation Temperature	-30 ~ 30( $^{\circ}$ C)
Operation Humidity	10 ~ 30(%)

Option	
Others	

## 1. Dimension

- 16mm(L)×3(W)×1.6(H)

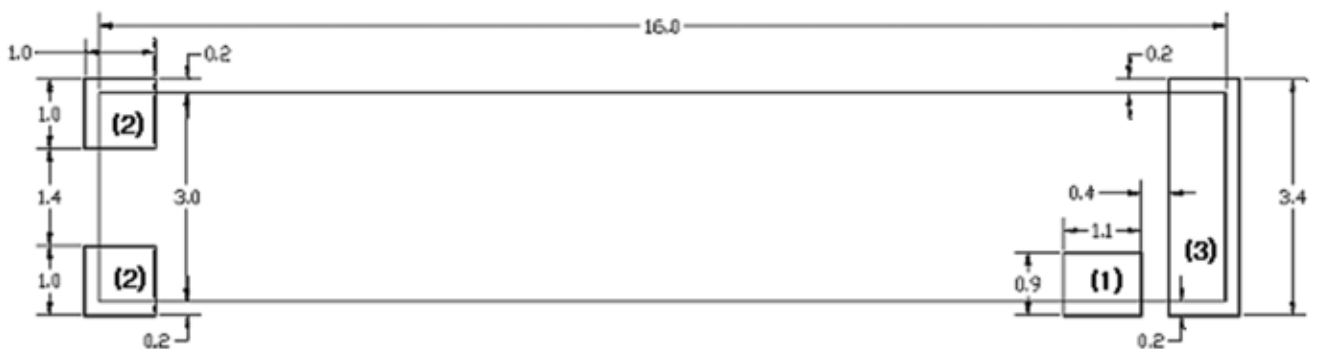


Dimension



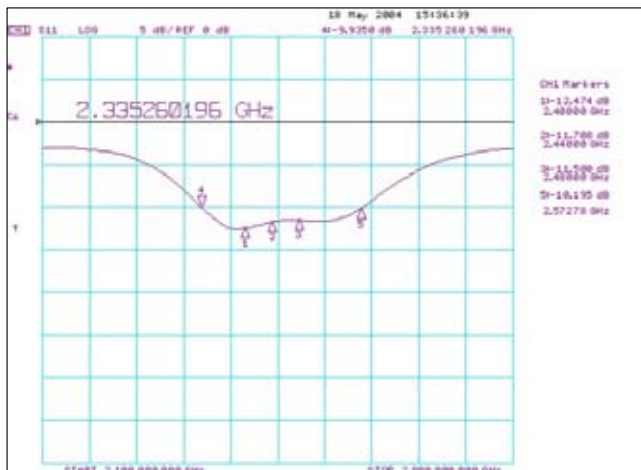
Bottom land pattern

- \* The chip antenna is required to be used on our suggested PCB.

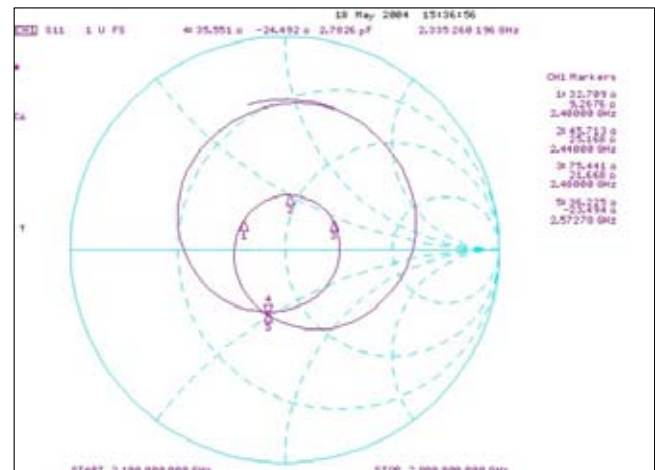


- (1) Feed point
- (2) NC(Mount points)
- (3) GND

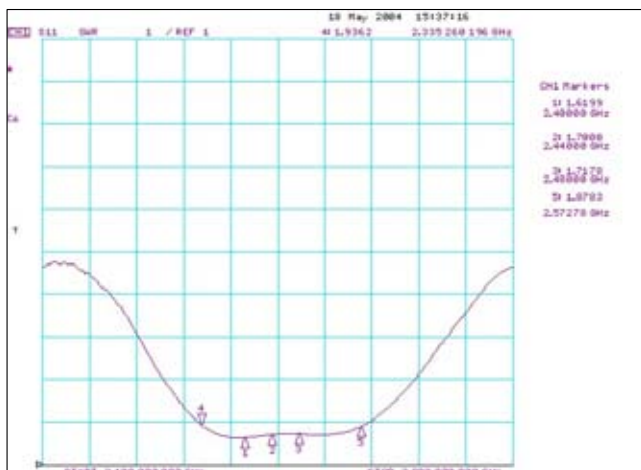
## 2. Characteristic



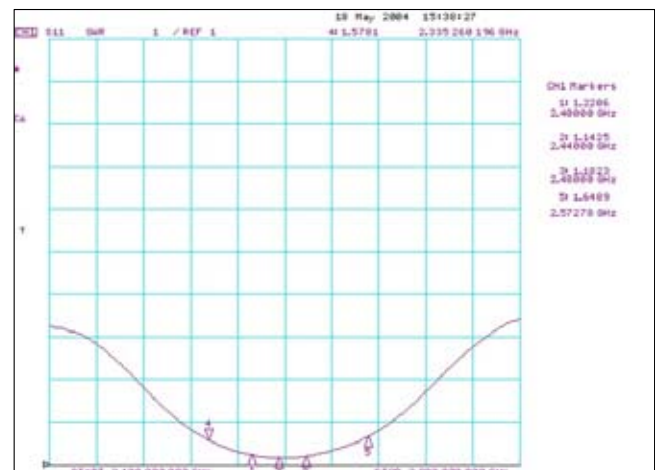
< Tuning Ant. : AEC\_IJM\_004-S11 >



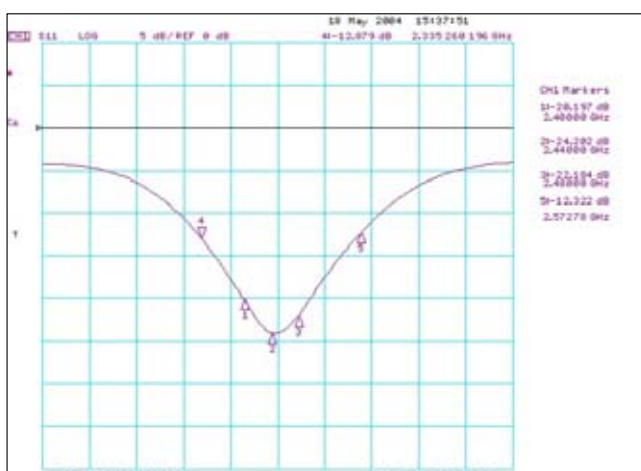
< Tuning Ant. : AEC\_IJM\_004-Smith Chart >



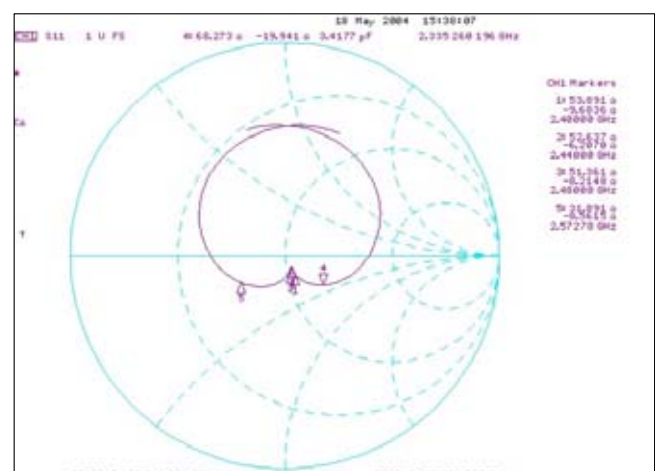
< Tuning Ant. : AEC\_IJM\_004-vswr >



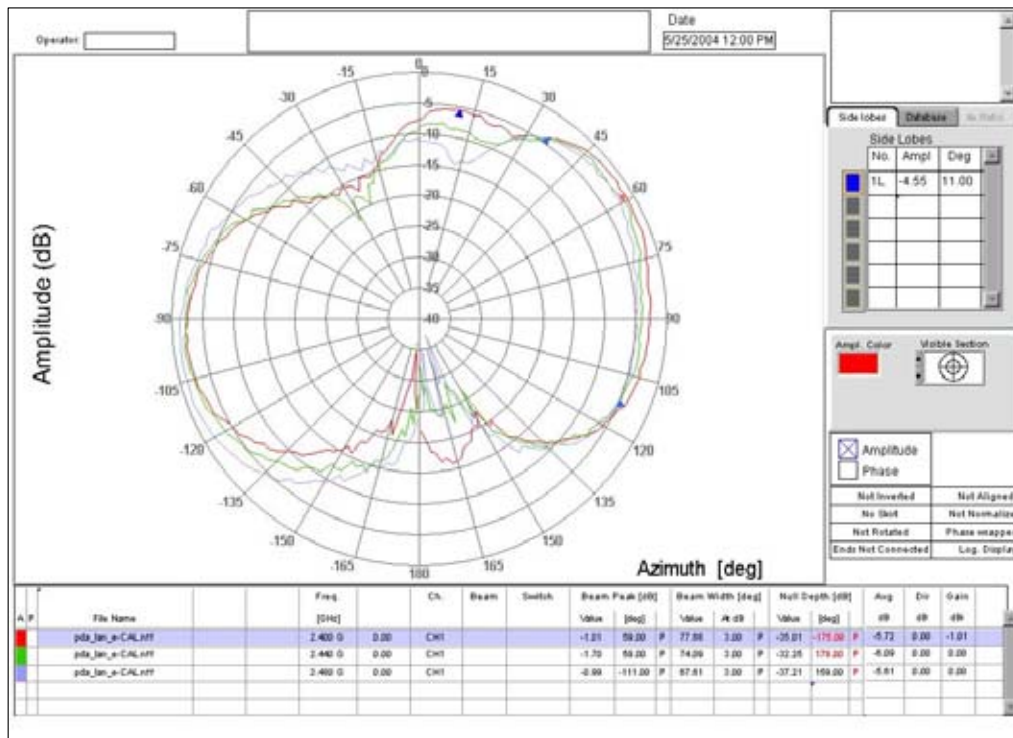
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< PDA >



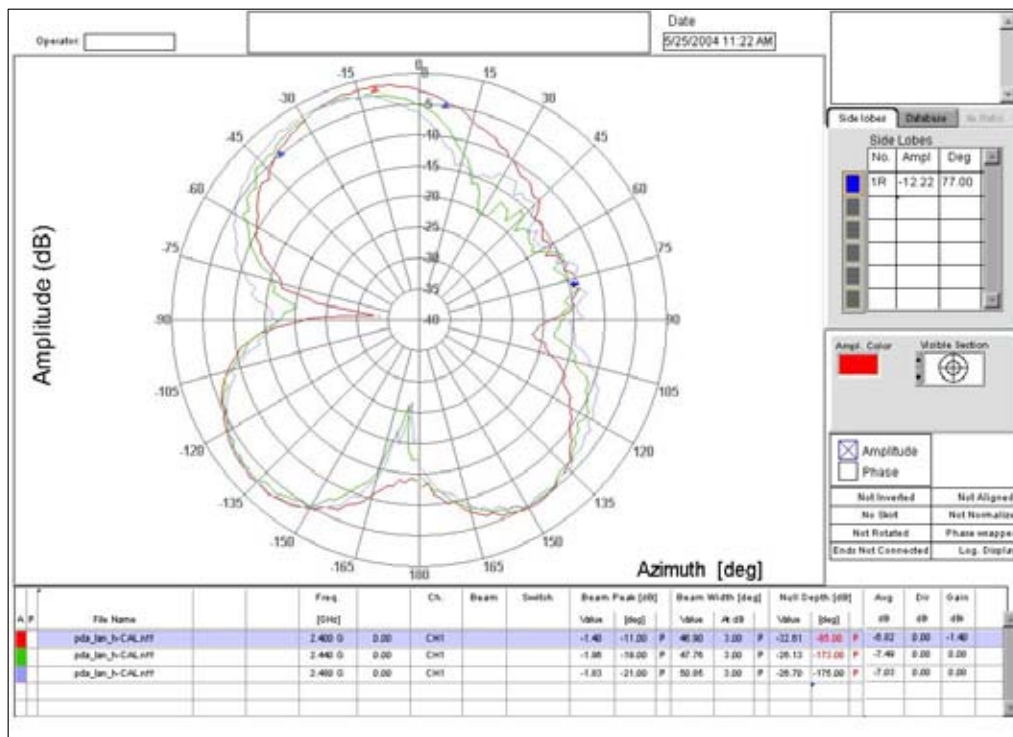
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< PDA >



< Tuning Ant. : AEC\_IJM\_004-Smith Chart >  
< PDA >



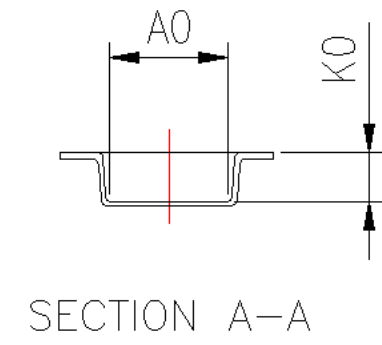
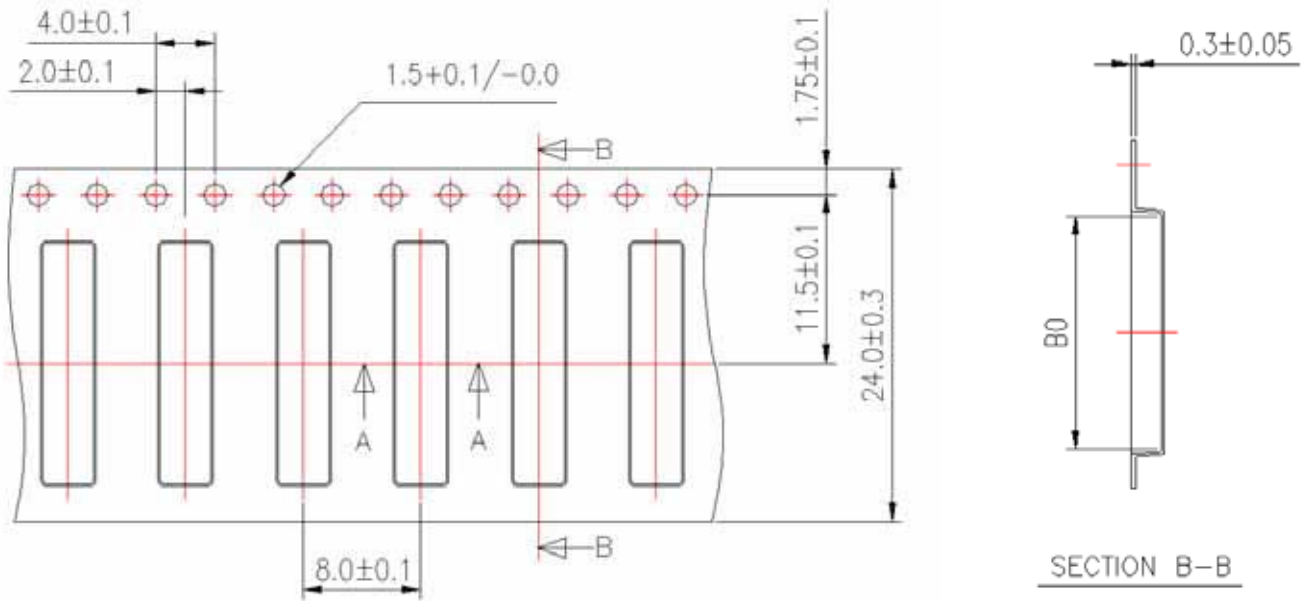
< AEC\_MCL\_001 : E-Plane >



< AEC\_MCL\_001 : H-Plane >

## 2. Taping

### • Dimension of Tape (Plastic Case)



주]

1. 지시 없는 라운딩 Max R0.5

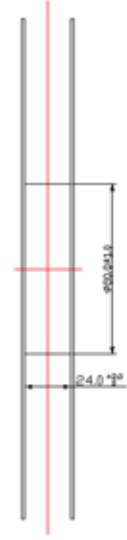
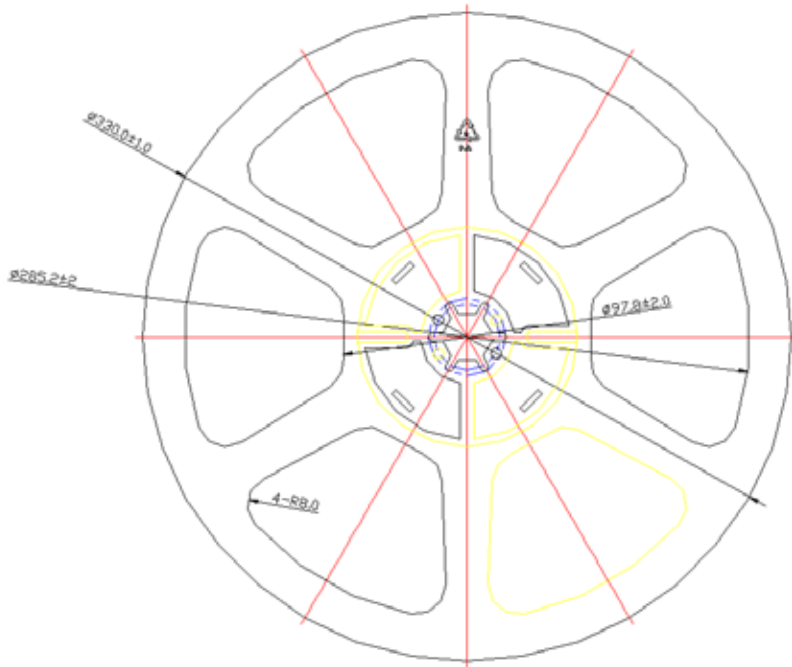
2. 빠짐기울기 Max  $5^\circ$

A0 :  $3.40 \pm 0.10$

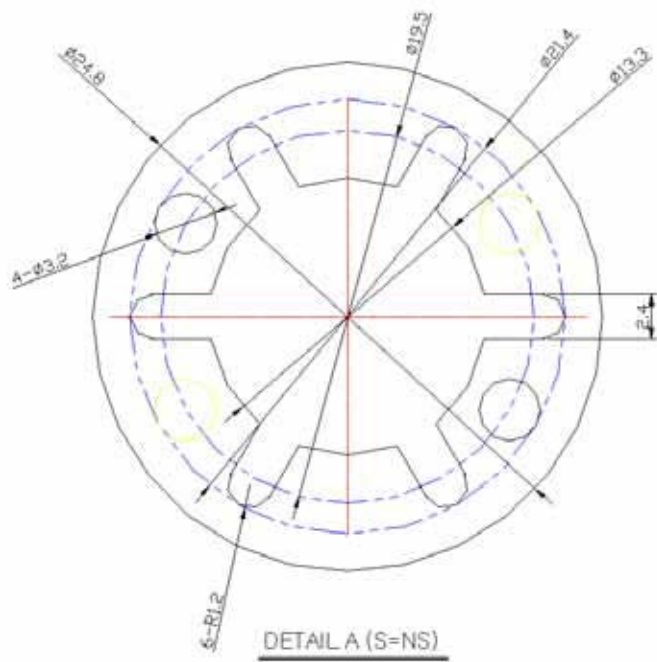
B0 :  $16.40 \pm 0.10$

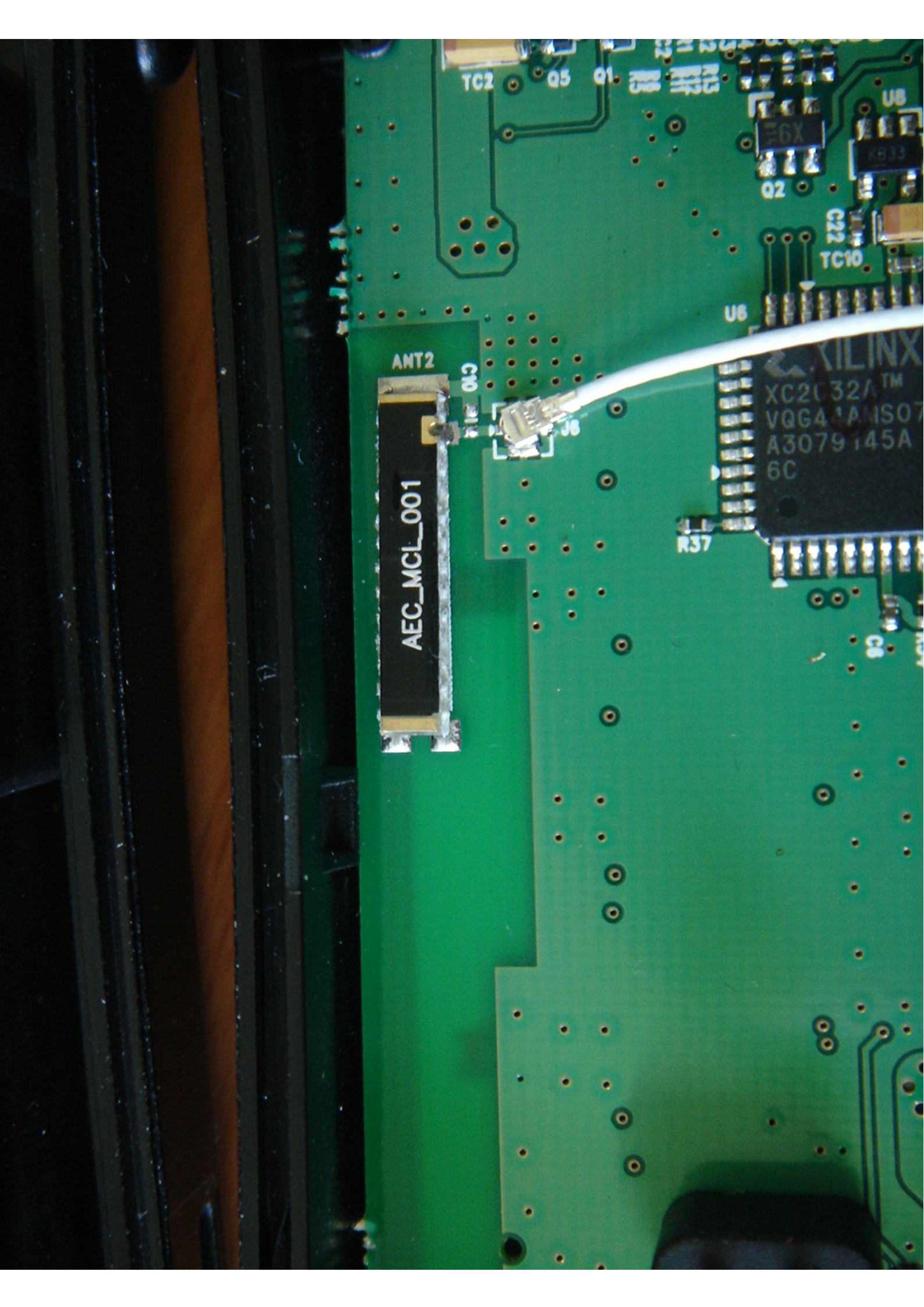
K0 :  $2.10 \pm 0.10$

• Dimension of Reel (Plastic Reel)



주)  
 1. 지시 없는 공차는 0.5  
 2. 표면저항 :  $10^{-3} \sim 10^3 \Omega$





ANT2

AEC\_MCL\_001

TC2

Q5

Q1

Q2

U8

CS2

TC10

U8

XILINX  
XC2C32A™  
VQG44ANS07  
A3079145A  
6C

R37

C10

J8

C8