

1. SPECIFICATIONS

1.1. Electrical Characteristics

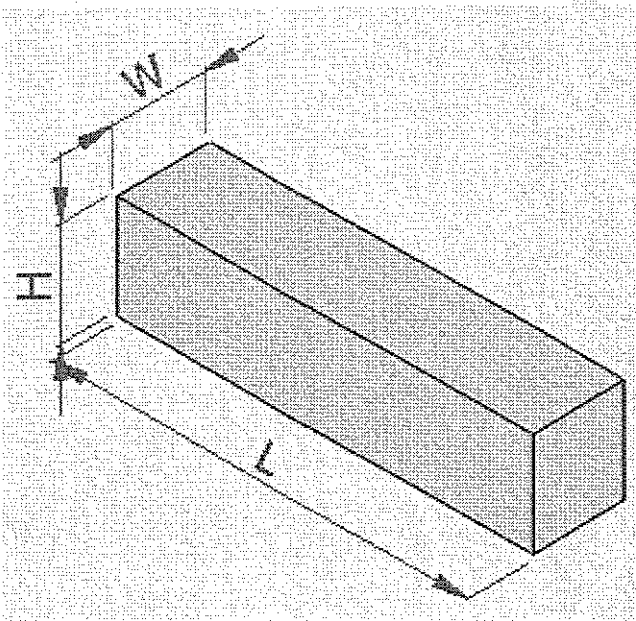
ITEM	SPEC	Remark
Frequency Range	2.4 ~ 2.485 GHz	
Polarization	Linear	
Nominal Impedance	50 Ω	
Gain (Avg.)	$\geq -3.0\text{dBi}$	
VSWR	≤ 3.0 (max.)	
Mounting Type	SMT	

※ Measured on the matched reference test board

1.2. Mechanical Characteristics

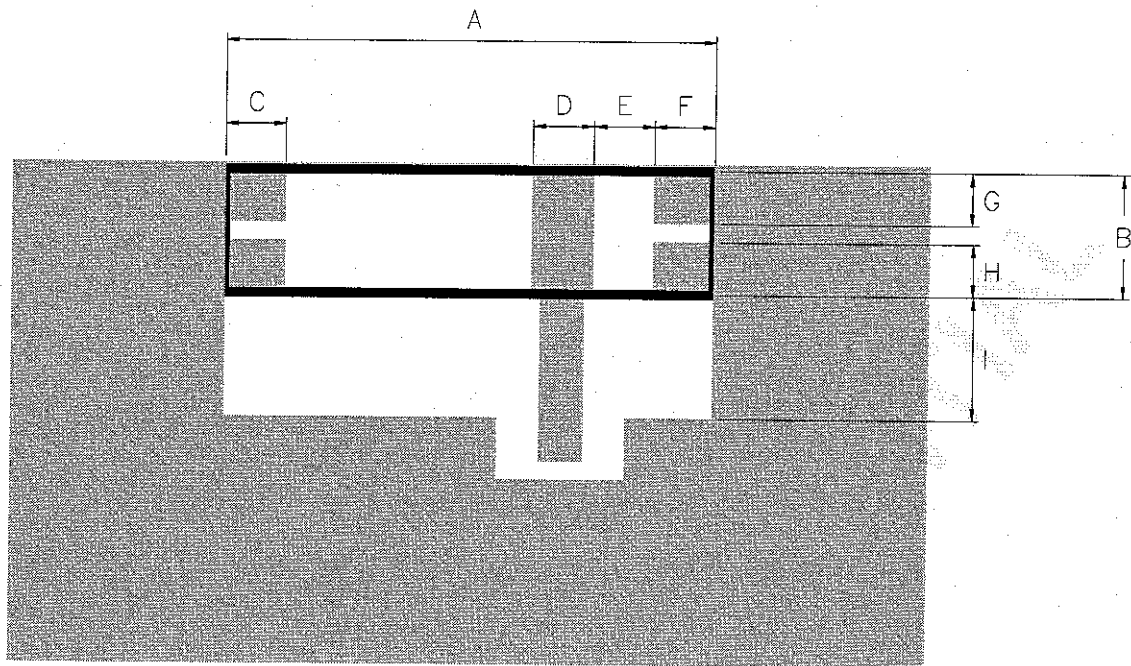
Electrode	Gold	Unit
Dimensions (L x W x H)	8.0 x 2.0 x 1.8	mm
Operating Temperature	-35 ~ +85	°C

1.3. Appearance and Dimensions



L (Length)	8.0 [mm]
W (Width)	2.0 [mm]
H (Height)	1.8 [mm]

1.4. Soldering Land Pattern/ Free Space Size



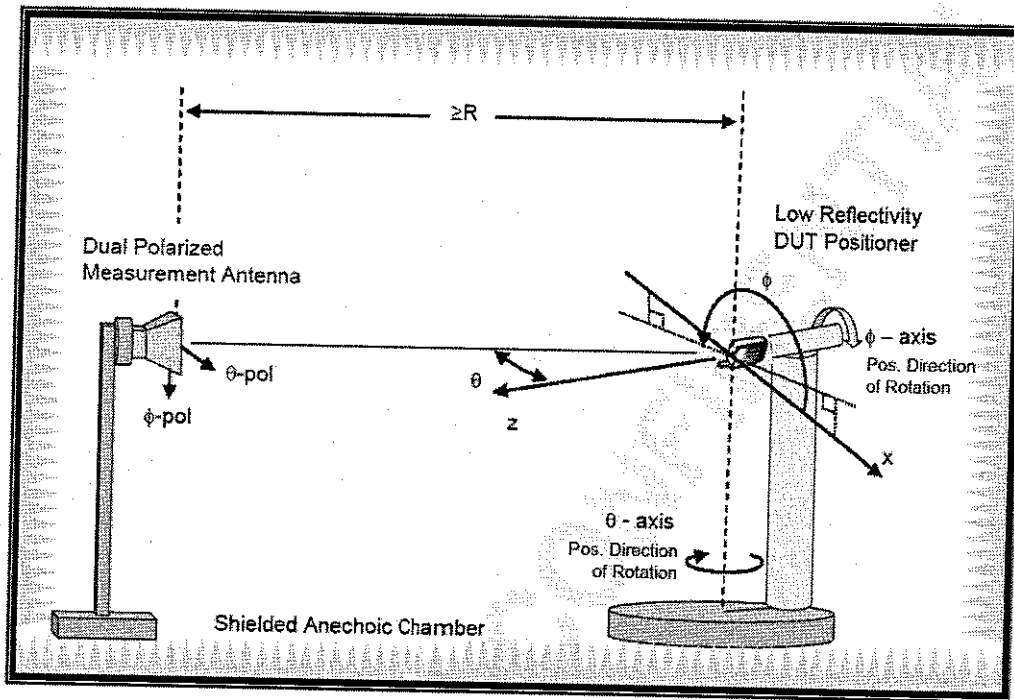
A	8.0
B	2.0
C	1.0
D	1.0
E	0.8
F	1.0
G	0.85
H	0.85
I	2.0

* 단위 [mm]

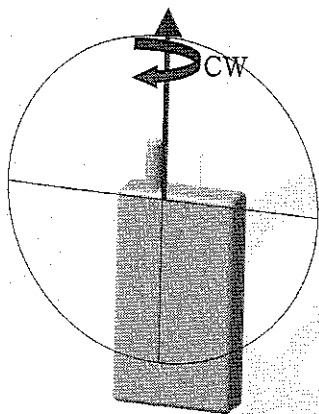
2. Measurement

2.1. Radiation Coordinates System

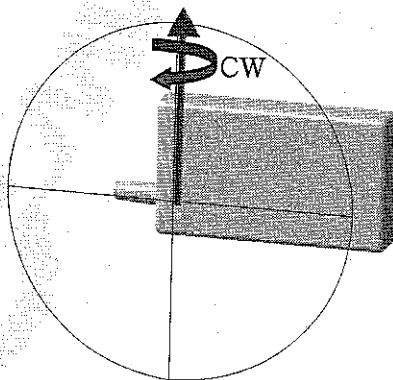
Radiation Pattern을 서비스 대역 주파수(2402MHz ~ 2485MHz)에서 측정한다. 무반사실에 Fig. 2.1과 같이 단말기를 거치 시킨 후 소스 Antenna의 편파를 Fig. 2.1(b)는 수직편파, Fig. 2.1(c), Fig. 2.1(d)는 수평 편파를 방사하여 수평회전 각도에 따른 단말기의 수신레벨을 측정한 후 각 상이한 주파수의 최대이득의 평균값, 평균이득의 평균값을 측정한다.



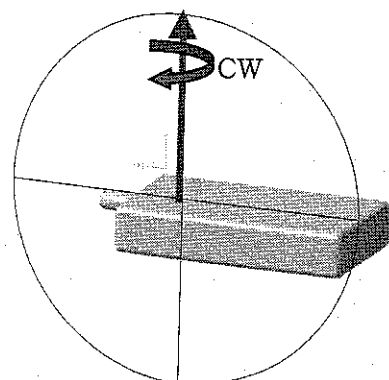
(a) TYPICAL SETUP - FREE SPACE



(b) H-Plane (XY-Plane)



(c) E1-Plane (XZ-Plane)

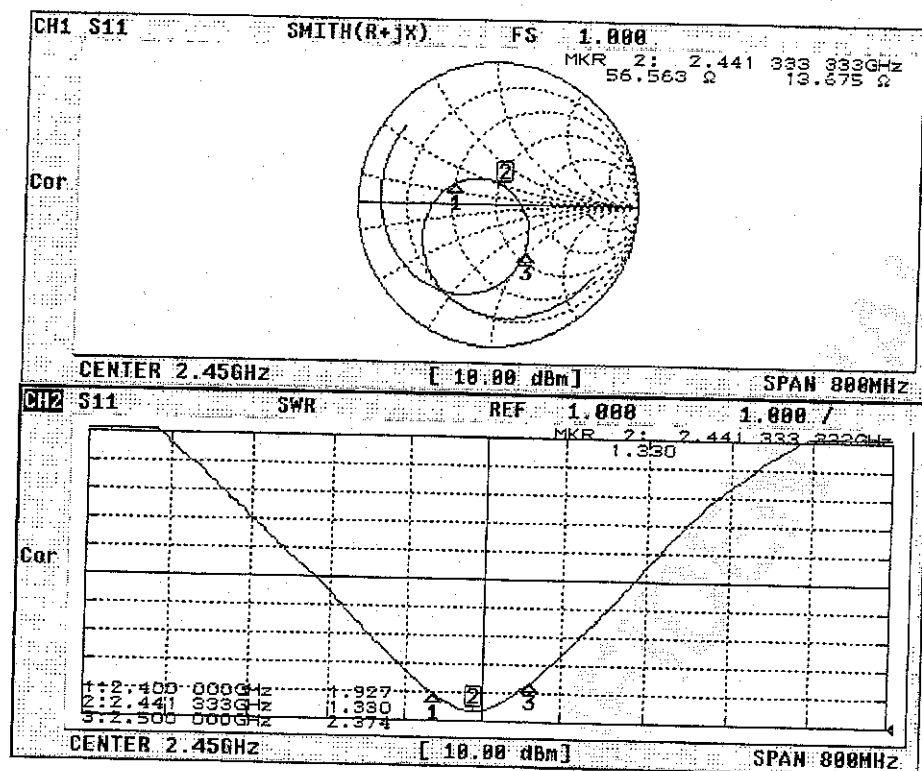


(d) E2-Plane (YZ-Plane)

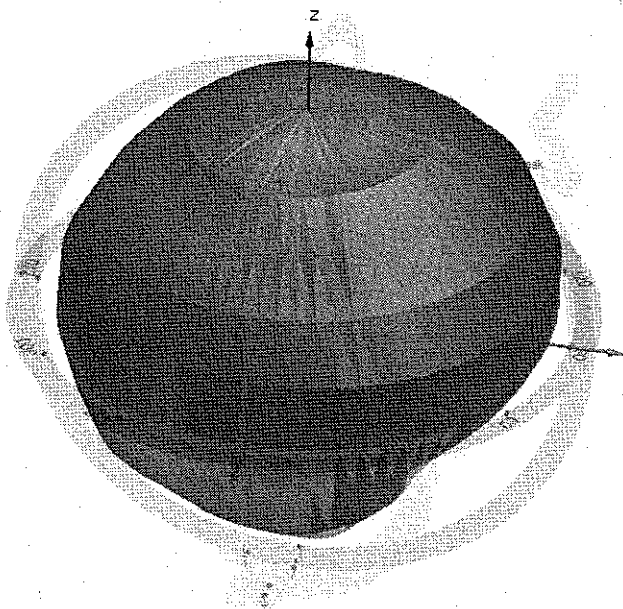
Fig 2.1 3D Gain 측정위치

2.2. Measurement Result (Reference Test Board)

A. Smith-Chart & VSWR



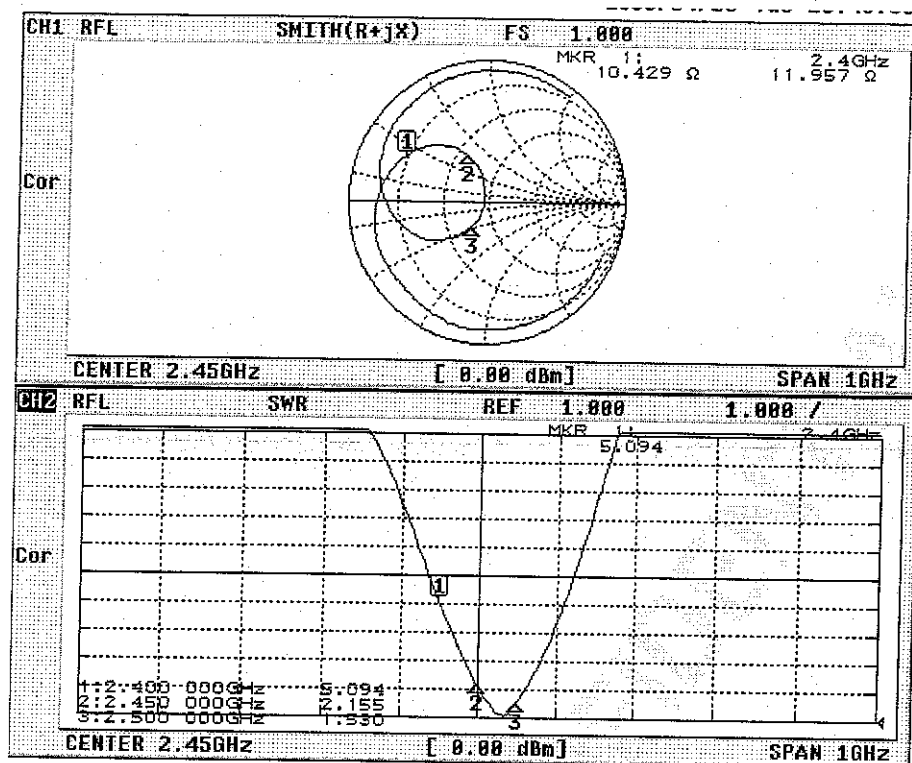
B. Radiation Pattern & Gain Table



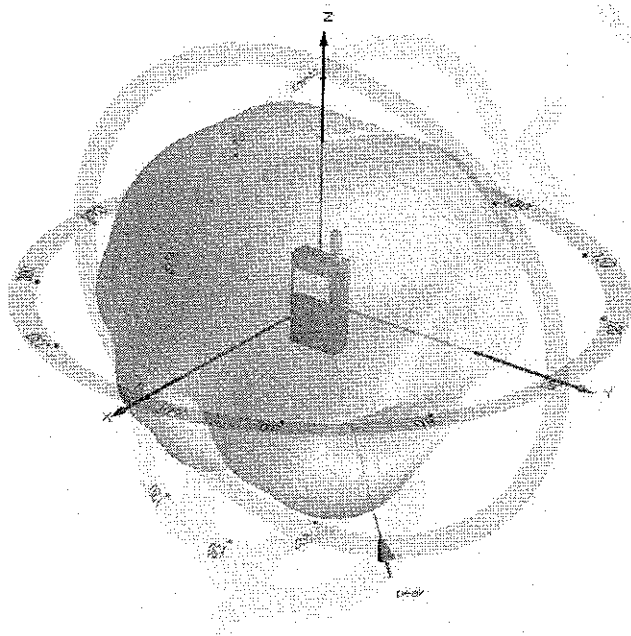
B/T Band	Gain [dBi]	
Freq. [MHz]	Peak	Avg.
2400	2.12	-2.33
2425	2.21	-2.28
2450	2.56	-2.25
2475	2.69	-2.49
2500	2.66	-2.94

2.3. Measurement Result (SET)

A. Smith-Chart & VSWR



B. Radiation Pattern & Gain Tables



B/T Band	Gain [dBi]	
Freq. [MHz]	Peak	Avg.
2400	-4.47	-8.58
2425	-3.14	-7.08
2445	-1.62	-5.66
2465	-1.06	-5.36
2585	-0.99	-5.63