

APPROVAL SHEET

CUSTOMER : 中磊電子股份有限公司
SerComm Corp.

MODEL NO. : IWM-144-105

DESCRIPTION : 2.4GHz Flying Lead
Swivel Antenna

Customer Approval

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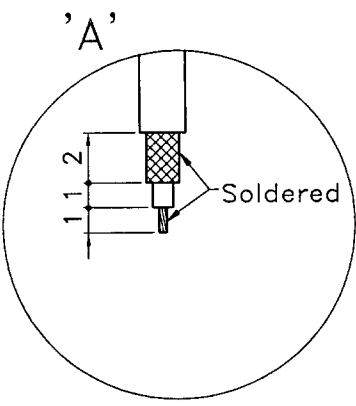
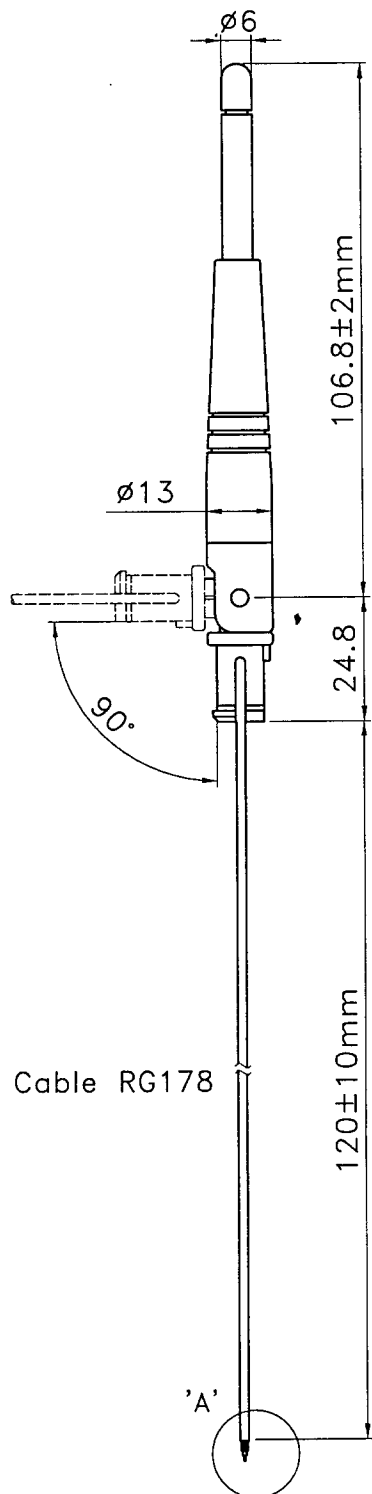


士誼科技事業有限公司
JOYMAX ELECTRONICS CORP.

桃園縣平鎮市新榮路63巷17號
17, Hsin-Jung Rd., Ping-Chen, Tao-Yuan, Taiwan, R.O.C.
Tel: +886-3-4931401 Fax: +866-3-4931126
E-Mail : ericlai@joymax.com.tw

技事業有
和國服
全品類
10804
大新發

工程 / 部品圖



TOLERANCES:

X	± 1
X.X	± 0.5
X.XX	± 0.25
ANG.	± 2.0°

REV DESCRIPTION	MATERIAL	MODEL: IWM-144-105
	FINISH	NAME: Swivel Antenna
	UNIT: mm	PART No: IWM-144-105
	SCALE: 1/ 1.5 DATE: 01/16/2003	DESIGN: K.Y.Liu APPROVE: [Signature] REV: 00

QP0502-01-02

1. Description:

The Antenna is a flying lead swivel and $1/4 \lambda$ dipole antenna. It's useful for the ISM Band of 2.4~2.5 GHz.

2. Electrical Properties :

- 2-1 Frequency Range..... 2.4~2.4835GHz
- 2-2 Impedance..... 50 Ohms nominal
- 2-3 SWR..... ≤ 2.0
- 2-4 Return Loss..... ≤ -10 dB
- 2-5 Gain..... 2 dBi
- 2-6 Polarization..... Vertical
- 2-7 Admitted Power..... 1W
- 2-8 Electrical Wave..... $1/4 \lambda$ Dipole

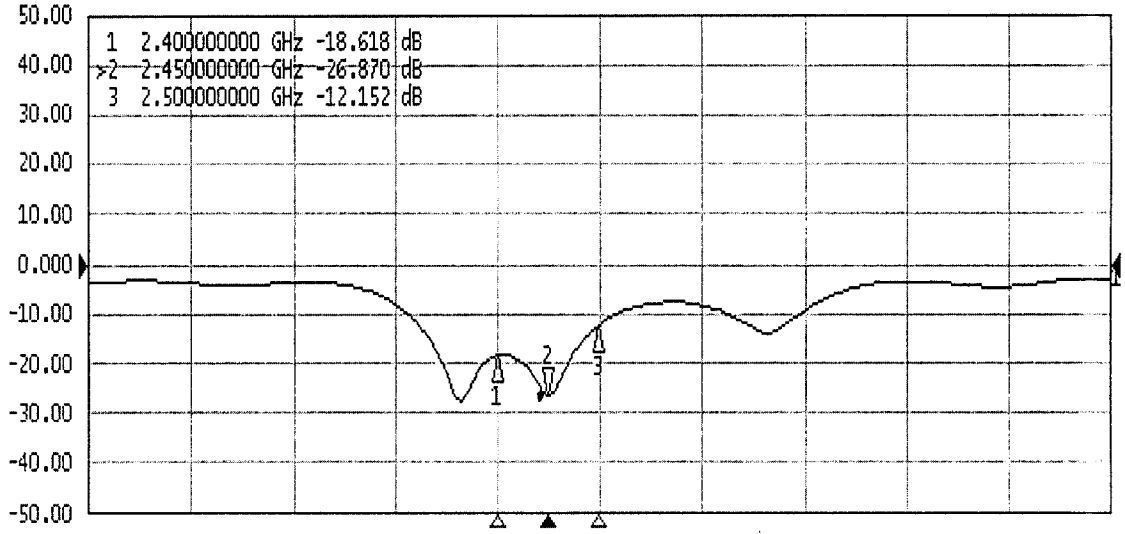
3. Mechanical Properties :

- 3-1 Cable..... M17/93-RG178
- 3-2 Antenna Cover..... Polyurethane
- Antenna Base..... Polycarbonate
- 3-3 Rotating Test..... 1.0 Kg-cm, After 2000 cycles with the rate of 30 cycles/minute(max.). It shall be possible to remain it's position.
- 3-4 Attachment Strength..... 2.0 Kg-cm



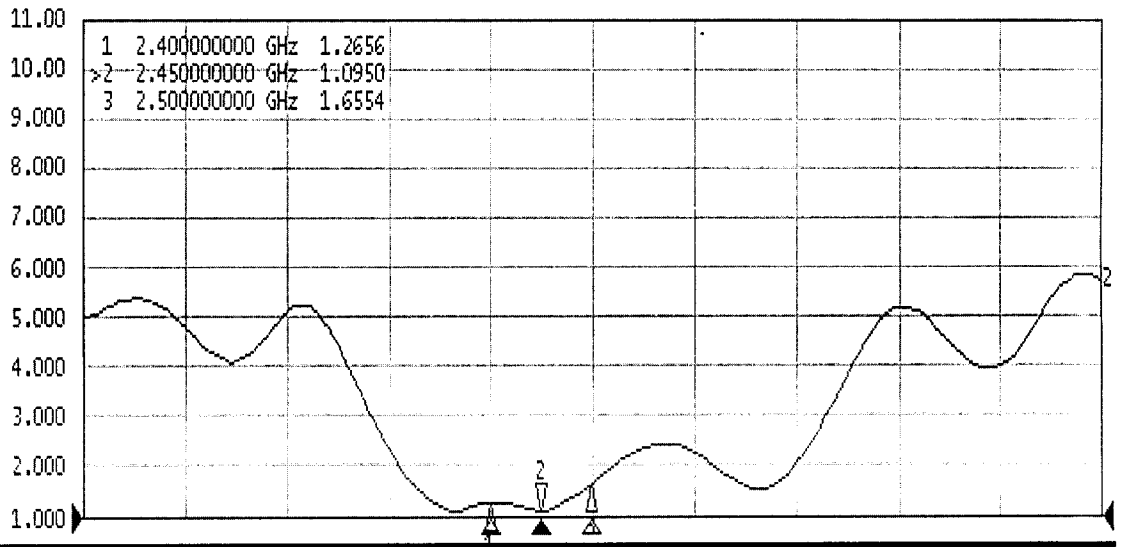
Return Loss

Tr1 522 Log Mag 10.00dB/ Ref 0.000dB [R0]



SWR

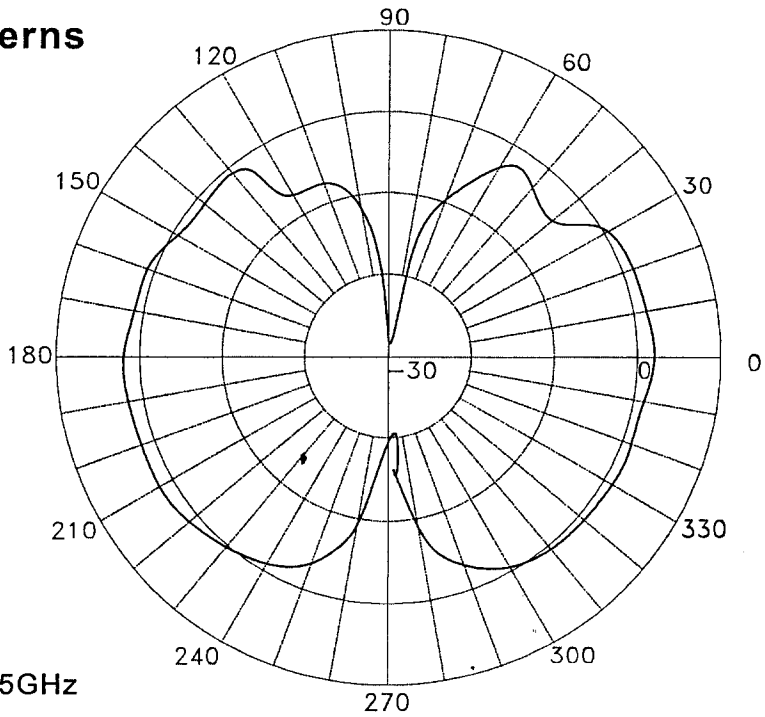
Tr2 522 SWR 1.000/ Ref 1.000 [R0]



3 Start 2 GHz IFBW 70 kHz Stop 3 GHz

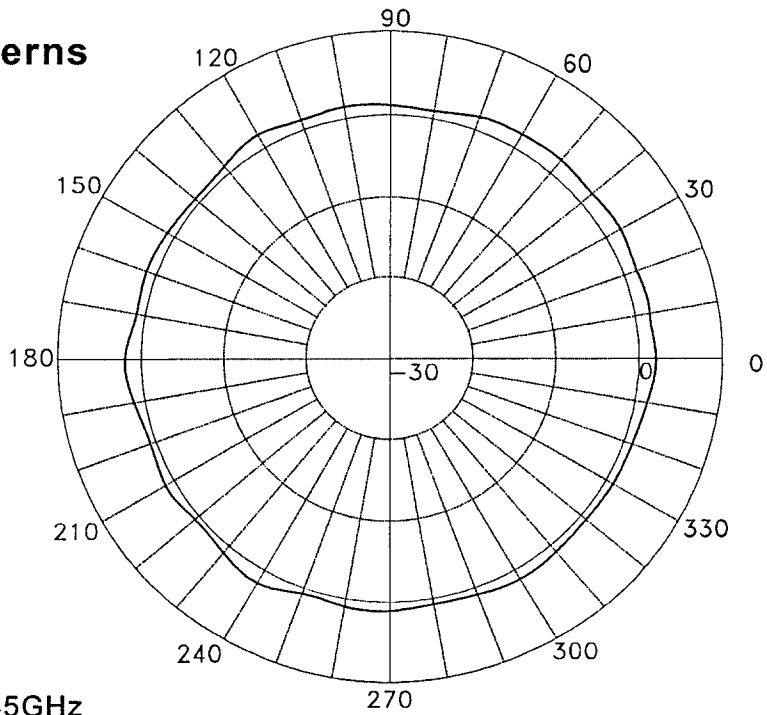


E-Plane Field Patterns



Frequency: 2.45GHz

H-Plane Field Patterns

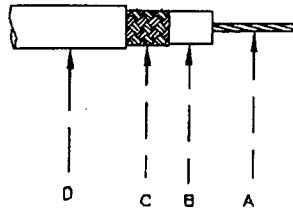


Frequency: 2.45GHz



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Rev	Change	Date



Construction:

- A) Center Conductor:
30 7/38 SPCW
OD .012" ± .001"
- B) Dielectric:
Extruded PTFE
OD .033" ± .002"
- C) Shield:
38 AWG SPC
OD .051" Nom.
- D) Jacket:
FEP - Brown Tint
OD .071" ± .004"
Surface Printed: "RG178HF HARBOUR INDUSTRIES 27478"

Electricals:

Impedance: 50 ± 2 Ohms
 Capacitance: 32 pF/ft Max.
 Velocity of Prop.: 70% Nom.
 Cut off Frequency: 116 GHz

Physical Properties:

Weight per 1000 ft: 6.3 lbs Max.
 Minimum Bend Radius: .35"
 Operating Temperature Range: -55°C to 200°C

Attenuation:

1.0 GHz	45.0 dB/100ft.
2.0 GHz	64.4 dB/100ft.
3.0 GHz	79.7 dB/100ft.
4.0 GHz	92.7 dB/100ft.
5.0 GHz	104.3 dB/100ft.
6.0 GHz	115.0 dB/100ft.

Harbour Industries		
Date: 12/17/01	Scale: None	Drawn By: MTPiner
Drawing Name: RG178HF		Approved By: <i>[Signature]</i>
Part Number: TED		Rev: Sheet 1 of 1
Drawing Number: 121701_1		

