
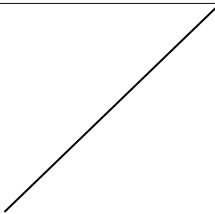
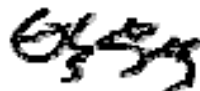


APPROVAL SHEET

**MODEL: PM250
ANTENNA**




Point Mobile

Customer	Point Mobile		
	EN' GR	CHKD	APPD
Customer's Approved			
Approval Date	2008.12. 09		2008.12. 09

Date of Issue: 2008. 12. 04

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	Mechanical Part	Electrical Part	Approval
Part Division			
	12 / 4	12 / 4	12 / 4
Part Name	SB0632T0A		
Model Name	PM250		

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1. Revision History

NO.	Before	After	Reason	Date
1				
2				
3				
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2. General Application

This document specifies the chip antenna for the mobile communication terminal.

Model Number	SB0633T0A
Application	Bluetooth

3. Technical Specification

3.1 Electrical Specification

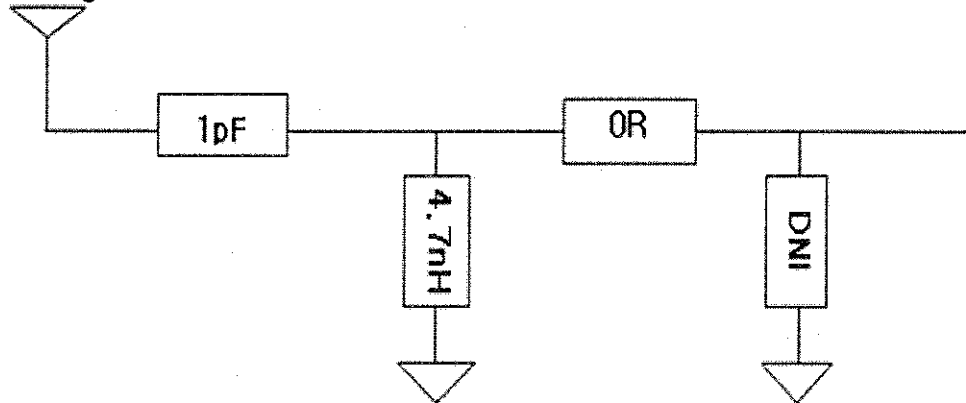
No	Item	Specification	Remarks
1	Frequency Range	2.4GHz ~ 2.48GHz	
2	VSWR	2:1	
3	Impedance	50 Ω	
4	3D Efficiency	Board:55%, Set:50%	
5	Polarization	Linear	
6	Radiation Pattern	Omni directional	

3.2 Mechanical Specification

No	Item	Specification	Remarks
1	Dimension	12.5*12.9*2.0 (H) mm	
2	Operating Temperature	-30℃ ~ +80℃	
3	Operating Humidity	10% ~ 90%	
4	Weight	0.5g	
5	Connector Type	Solder	Reel Packing

4. Measurement Data

4.1 Matching Circuit



4.2 VSWR & Smith Chart

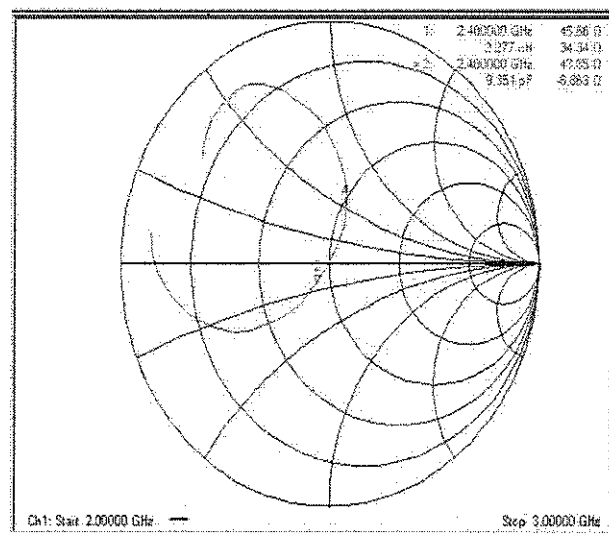
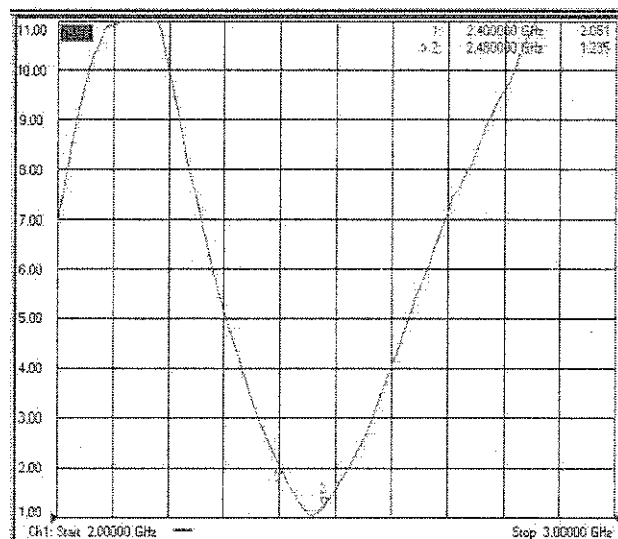


Fig 2. VSWR & Smith Chart

4.3 Test Result (3D Efficiency)

	1	2	3	4	5	6	7	8	9	10
Frequency(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490
Efficiency(dB)	-3.48	-3.38	-3.18	-3.09	-2.75	-2.80	-2.55	-2.35	-1.93	-2.27
Efficiency(%)	44.92	45.93	48.06	49.14	53.06	52.43	55.60	58.25	64.13	59.27
TRG(dB)	-3.48	-3.38	-3.18	-3.09	-2.75	-2.80	-2.55	-2.35	-1.93	-2.27
TRG _{Total} (dB)	-6.84	-6.67	-6.61	-6.40	-6.00	-6.09	-5.91	-5.61	-5.43	-5.95
TRG _{PR} (dB)	-6.13	-6.12	-5.81	-5.81	-5.54	-5.55	-5.24	-5.12	-4.46	-4.70
UHRG(dB)	-6.93	-6.33	-6.55	-6.41	-6.07	-6.09	-5.77	-5.49	-5.03	-5.34
UHRG/TRG(%)	44.66	45.15	48.00	48.52	45.61	46.90	47.59	48.47	48.98	49.33
H-Plane	-6.71	-6.56	-6.52	-6.30	-5.87	-5.91	-5.70	-5.35	-5.26	-5.77
E1-Plane, AVG(dB)	-5.94	-5.91	-5.97	-5.84	-5.52	-5.73	-5.66	-5.45	-5.39	-5.91
E2-Plane, AVG(dB)	-6.53	-6.31	-6.19	-5.93	-5.45	-5.44	-5.13	-4.72	-4.48	-4.82
Peak Gain(dB)	0.97	0.98	1.00	0.95	1.20	1.05	1.12	1.20	1.46	1.06
Directivity(dB)	4.44	4.35	4.13	4.04	3.96	3.85	3.67	3.55	3.41	3.33
Minimum Gain(dB)	-9.00	-8.34	-7.78	-7.29	-7.05	-7.11	-7.01	-6.83	-6.65	-7.09
Test Condition										
Antenna Type										
Average Efficiency	-2.75 dB,		53.08 %							

4.4 Radiation Pattern

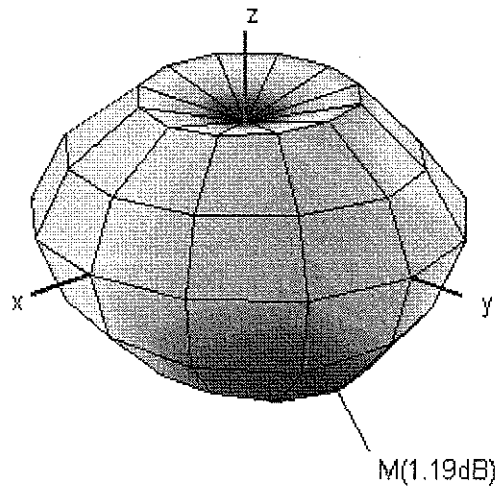


Fig 3. Radiation Pattern

	Efficiency (%)	Efficiency (dB)	UHRG(dB)	Peak Gain
Radiation	53%	-2.75	-6.5	1.2dB

5. Reliability Specification

No	Item	Conditions and Method
1	Temperature Shock	<ul style="list-style-type: none"> ● Perform 10 cycles as follow ■ High Temp.: 30min, +85°C ■ Low Temp.: 30min, -40°C ■ Repeat : 10 times ● Stabilize at room temperature for measurement
2	Dry Heat Test	<ul style="list-style-type: none"> ● Dwell in +85°C chamber for 72 hours ● Stabilize at room temperature for measurement
3	Low Temperature Test	<ul style="list-style-type: none"> ● Dwell in -40°C chamber for 72 hours ● Stabilize at room temperature for measurement
4	Humidity Test	<ul style="list-style-type: none"> ● Dwell in test chamber at +50C and 95% RH for 24 hours ● Stabilize at room temperature for measurement
5	Drop Test	<ul style="list-style-type: none"> ● Conditions ■ Drop height: 1.5 m ■ Drop angle: 45 ° / 90 ° ■ Drop cycle : Each 5 times ■ Weight : 150 g
6	Salt Spray Test	<ul style="list-style-type: none"> ● After exposing to 5% sodium atmosphere at +35° C for 72 hours and washing pure water, test within 2 hours

6. Packing Specification

Item	Quantity	Materials	Remarks
Tray	100EA	P.S/PET	

7. Drawing

