

SPECIFICATION

APPLICATION FOR APPROVAL

CUSTOMER : 中興通訊股份有限公司
CS P/N : ZTE T12
PART NAME : INTERNAL ANTENNA
DEVE NO. : AUK0819B-主
AUDEN NO. : N/A
DATE : Jan.09.2012
Release : Full release

Customer Approval			
RF ENGINEER	MECHANICAL ENGINEER	R&D MANAGER	PRODUCT MANAGER
AUDEN COMMUNICATIONS&MULTIMEDIA TECHNO (KUNSHAN) CO.LTD			
RF ENGINEER	MECHANICAL ENGINEER	R&D MANAGER	PRODUCT MANAGER

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REVISION

REV.NO.	DATE	DESCRIPTION
0	Jan.09.2012	APPROVAL

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Application Date:Jan.09.2012
Editor: kelly
DOC NO.:MPS120104

Rev: 0

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0. DEFINITIONS

dBi	Decibel relative isotropic antenna
Tx	Transmit frequency
Rx	Receive frequency
VSWR	Voltage Standing Wave Ratio
GSM	Global Service for Mobile communication
DCS	Digital Communication System
PCS	Personal Communication System
CDMA	Code Division Multiple Access
WCDMA	Wideband Code Division Multiple Access
PHS	Personal Handy-phone System
SAR	Specific Absorption Rate
PCB	Printed Circuit Board
TBD	To Be Defined
P	Parallel connection
S	Series connection

1. ELECTRICAL SPECIFICATIONS

1-1 FREQUENCY BAND

Freq. Band	Tx(MHz)	Rx(MHz)
GSM850(W850)	824~849	869~894
GSM900	880~914	925~960
DCS	1710~1784	1805~1880
PCS(W1900)	1850~1910	1930~1990
W2100	2010~2025	2010~2025

1-2 IMPEDANCE

Nominal Impedance(including matching circuit) : 50 ohms

1-3 MATCHING REQUIREMENTS

The matching circuit on the PCB of the handset is according to Figure 1-3.

Optimum matching circuit is highly dependent on the handset and thus.

Final matching circuit layout and values will be defined when handset is available.

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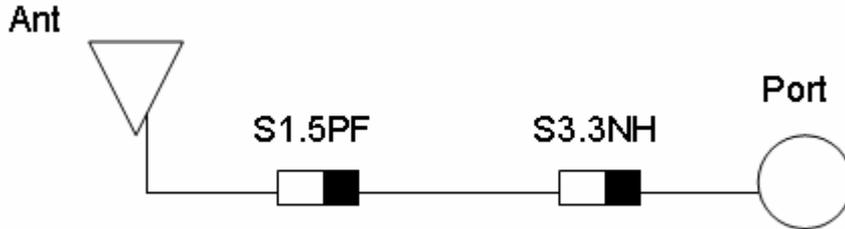


Figure 1-3

1-4 VSWR

FREE SPACE

<i>Freq.Band</i>	<i>spec</i>
824MHz	≦ 4.4
894MHz	≦ 2.9
960MHz	≦ 6.7
1710MHz	≦ 2.9
1850MHz	≦ 2.2
1920MHz	≦ 2.2
2170MHz	≦ 5.7
2112MHz	≦ 3.9
1977MHz	≦ 1.7

- ※Measuring a 50Ω test jig is connected to a network analyzer to measure the VSWR.
- ※※All test value is done in customer approval fixture.

2. MECHANICAL SPECIFICATIONS

2-1 MECHANICAL CONFIGURATION

The appearance of the antenna is according to Figure 2-1

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3. ENVIRONMENTAL CHARACTERISTICS

NO.	ITEM	TEST CONDITION	SPECIFICATION
3-1	Low Temperature Test	1. Temperature: $-40\pm 2^{\circ}\text{C}$ 2. Time: 48hrs	No material deformation is allowed.
3-2	High Temperature Test	1. Temperature: $+70^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 2. Time: 48hrs	
3-3	High Temperature/Humidity Storage Test(non operating)	1. Temperature: $+60 \pm 2^{\circ}\text{C}$ 2. Humidity: 90~93%RH 3. Time: 48hrs	
3-4	Salt-Spray Test	35°C, 85%RH, 48Hours(According to MIL-STD-810E) The salt-spray is generated from a 5% salt(NaCl) solution.,	NO appear rusting phenomenon is allowed

4. PACKAGING

Antenna to be packed in compartmentalized blisters tray. Each 35 pcs per tray.

5. APPENDIX

All of the specifications are shown as the attached files.

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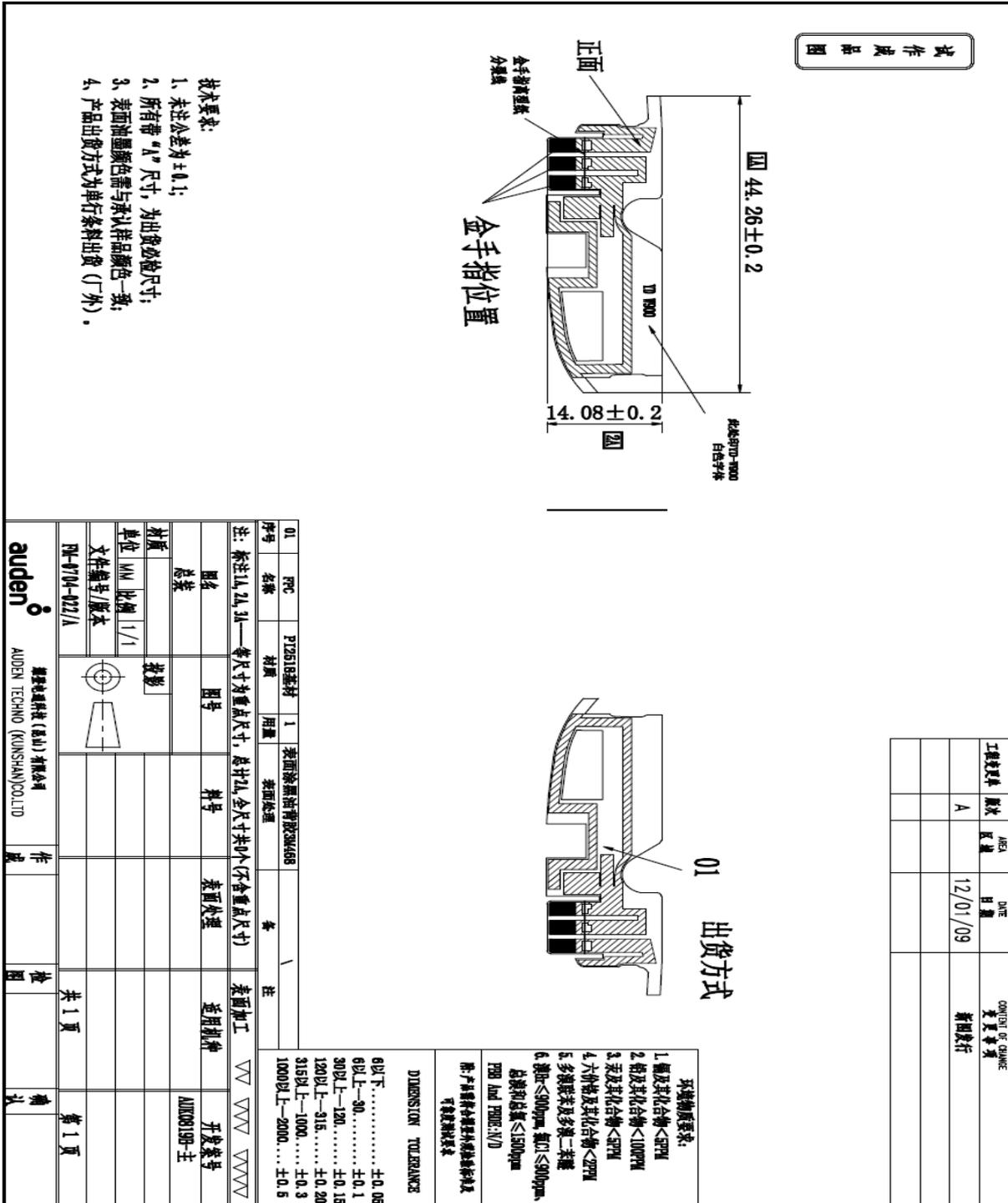


Figure 2-1

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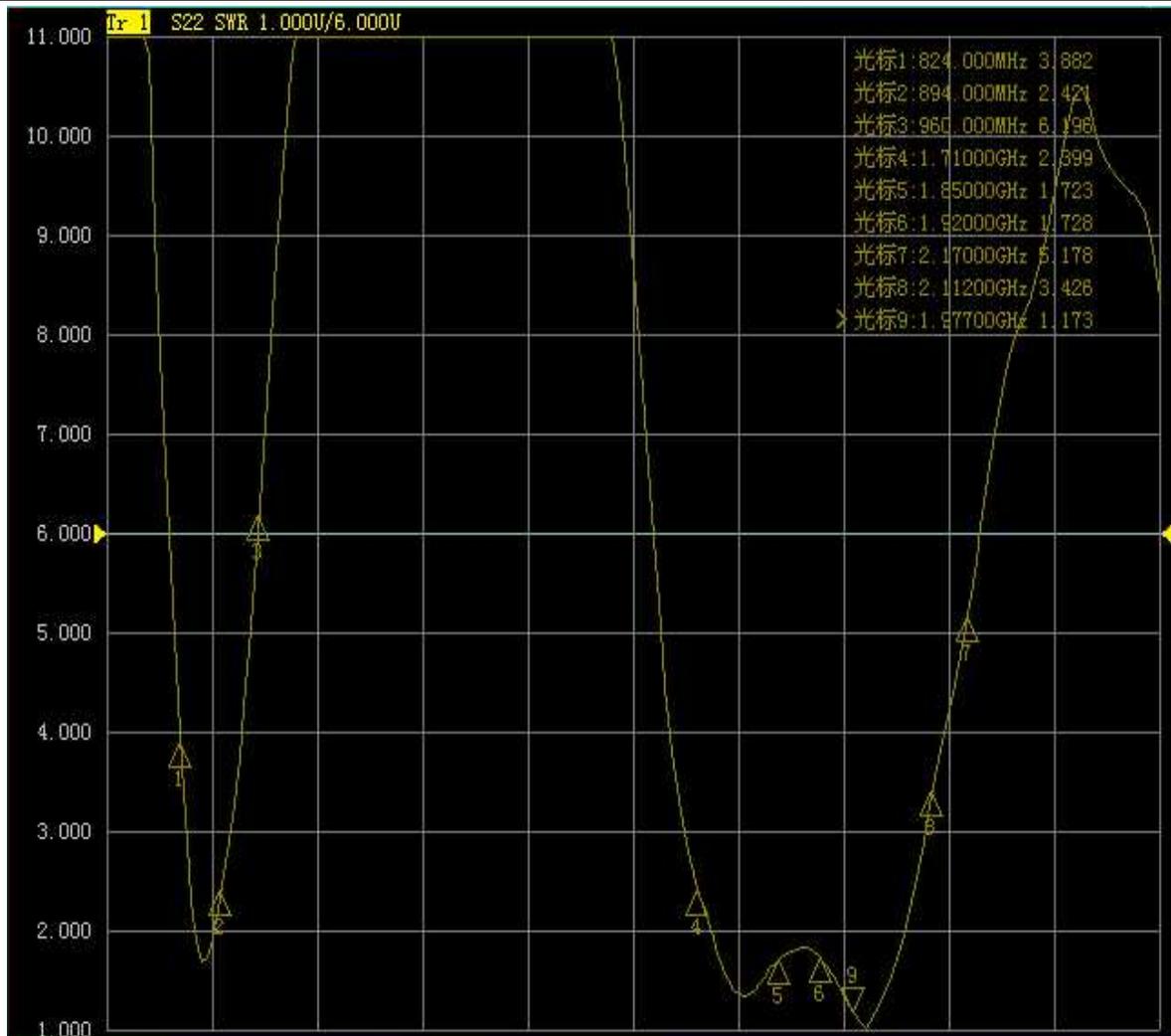
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Model No: ZTE T12	File: 2012-01-09
Deve No:AUK0819B-主	Note: VSWR
Sample No:	
Test Condition: FREE SPACE	Matching: 范伟凡
Confirmation:	Engineer: ANT-S1.5PF-S3.3NH-PORT



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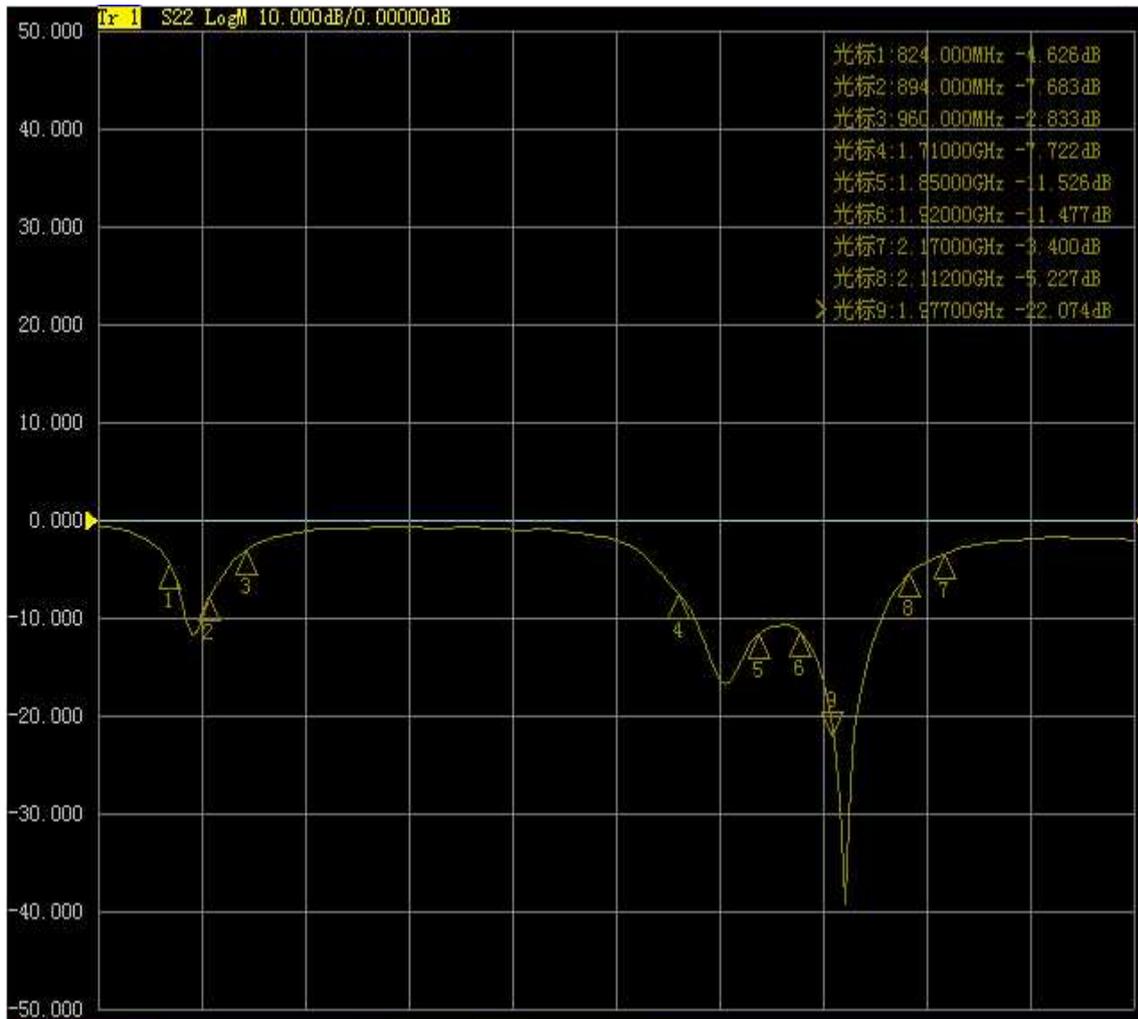
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Model No: ZTE T12	File: 2012-01-09
Deve No:AUK0819B-主	Note: RL
Sample No:	
Test Condition: FREE SPACE	Matching: 范伟凡
Confirmation:	Engineer: ANT-S1.5PF-S3.3NH-PORT



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Test Report



Customer : 中兴 Deve. No. : AUK0819B-主 Test Date: 2012/01/09
Model No. : ZTE T12 Operating Mode: GSM850/GSM900/DCS/PCS/W850/W1900/W2 Test Engineer:WILL
Matching: ANT-S1.5PF-S3.3NH-PORT

Auden				
22°C				
Band	Channel	Result(dBm)	Avg.Power(dBm)	Note
G850	128	29.44	30.22	
	190	30.55		
	251	30.57		
GSM900	975	29.43	28.66	
	62	28.27		
	124	28.15		
DCS	512	25.01	25.90	
	699	26.05		
	885	26.51		
PCS	512	26.38	25.62	
	660	25.28		
	810	25.08		
G850	128	-107.25	-106.71	
	190	-106.97		
	251	-106		
GSM900	975	-103.57	-103.88	
	62	-104.52		
	124	-103.62		
DCS	512	-103.73	-103.30	
	699	-103.45		
	885	-102.77		
PCS	512	-104.42	-103.87	
	660	-103.59		
	810	-103.66		
W850	4132	20.28	20.71	
	4185	21.12		
	4233	20.7		
W1900	9262		0.00	
	9400			
	9538			
W2100	9612	19.78	19.63	
	9750	19.66		
	9888	19.44		
W850	4357	-107.01	-107.30	
	4410	-108.42		
	4458	-106.66		
W1900	9662		0.00	
	9800			
	9938			
W2100	10562	-107.46	-106.71	
	10700	-106.63		
	10838	-106.15		

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