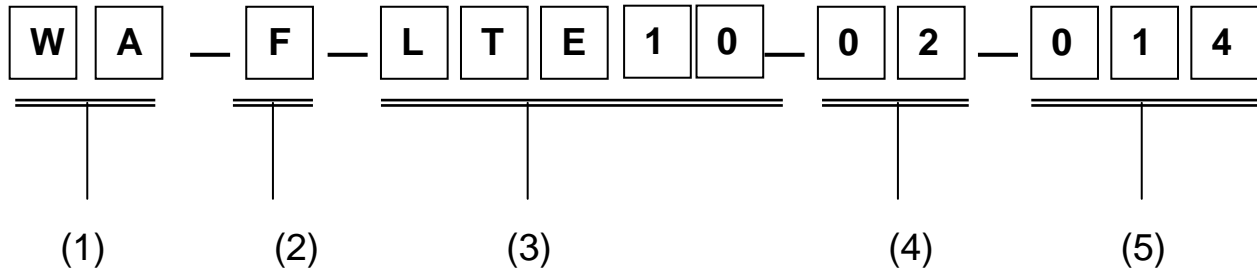


Embedded Multi Band Antenna for WA-F-LTE10-02-014

1. Explanation of part number :



(1) Product type : LTE Antenna

(2) Material : FPCB

(3) Frequency : 704~960MHz 、 1710~2170MHz 、 2300~2690MHz

(4) Coaxial Cable Type : Black

(5) Suffix : 014

2. Electrical Specification :

Those specifications were specially defined for model **LTE Antenna**, and all characteristics were measured under the model's handset testing jig.

2-1. Frequency Band :


Band	Frequency
LTE	704~960MHz 、 1710~2170MHz 、 2300~2690MHz

2-2. Impedance :

50 ohm nominal

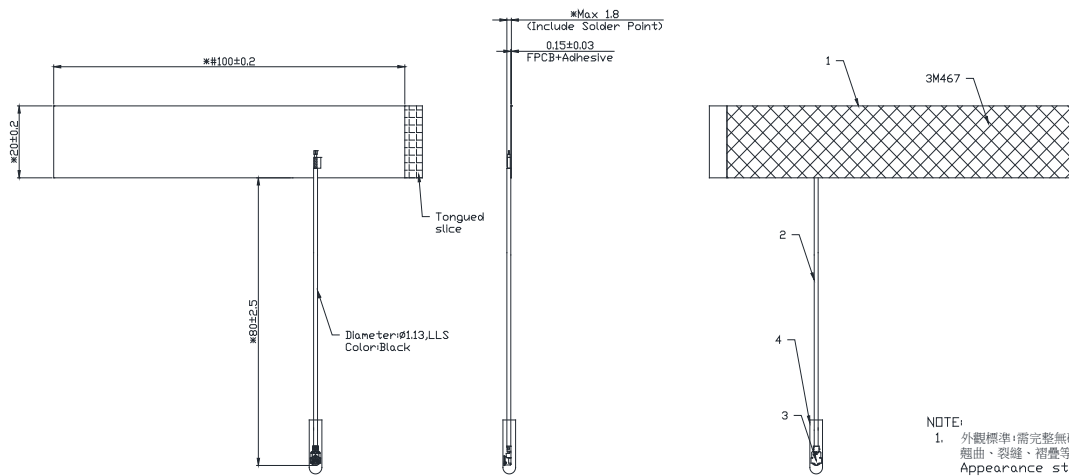
2-3. Matching circuit :

None

UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A X.X=N/A X.XX=N/A ANGLES=N/A HOLEDIA=N/A			INPAQ TECHNOLOGY CO., LTD.	
SCALE : N/A	UNIT : mm		THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION	
DRAWN BY : 黃建榮	CHECKED BY : 鄭榮謀			
DESIGNED BY : 陳郁峯	APPROVED BY : 謝立庭			
TITLE : Embedded Multi Band Antenna for WA-F-LTE10-02-014		DOCUMENT NO.	ENS000130040	SPEC REV. A0

3. Antenna Drawing :

The appearance of the antenna is according to drawing Figure.



- NOTE:
- 外觀標準:需完整無破損,不可有變形、髒污、毛邊、翹曲、裂縫、褶疊等情形。
Appearance standard: They must be complete. It means those must not have the deformations, dirt, burns, warps, cracks, folds, etc.
 - 工程圖上*#號為重點尺寸標註指示。
Mark *# are the key dimensions.
 - 工程圖上#號為Cpk量測尺寸標註指示。
Mark # are CPK dimensions.
 - 工程圖上△號為修改版次標註指示。
Mark △ are version dimensions.
 - DQC&FQC只需量測重點尺寸&CPK
CPK&KEY dimensions For DQC&FQC.

Drawing Rev. P0.A0

ITEM	DESCRIPTION	MATERIAL SPECIFICATION	QUANTITY	UNIT	SUPPLIER	UL File NO
1	FPCB	T=0.14mm,100*20 mm	1	PCS	HA0206	E354493
2	Cable	OD1.13, LS, Black	1	PCS	HA0008	E318898
3	Connector	IPEX MHF I-PEX Equivalent(compatible)	1	PCS	HA0063	N/A
4	Tube	OD3.0x20mm	1	PCS	N/A	N/A

UNLESS OTHER SPECIFIED TOLERANCES ON :
X=N/A X.X=N/A X.XX=N/A
ANGLES=N/A HOLEDIA=N/A



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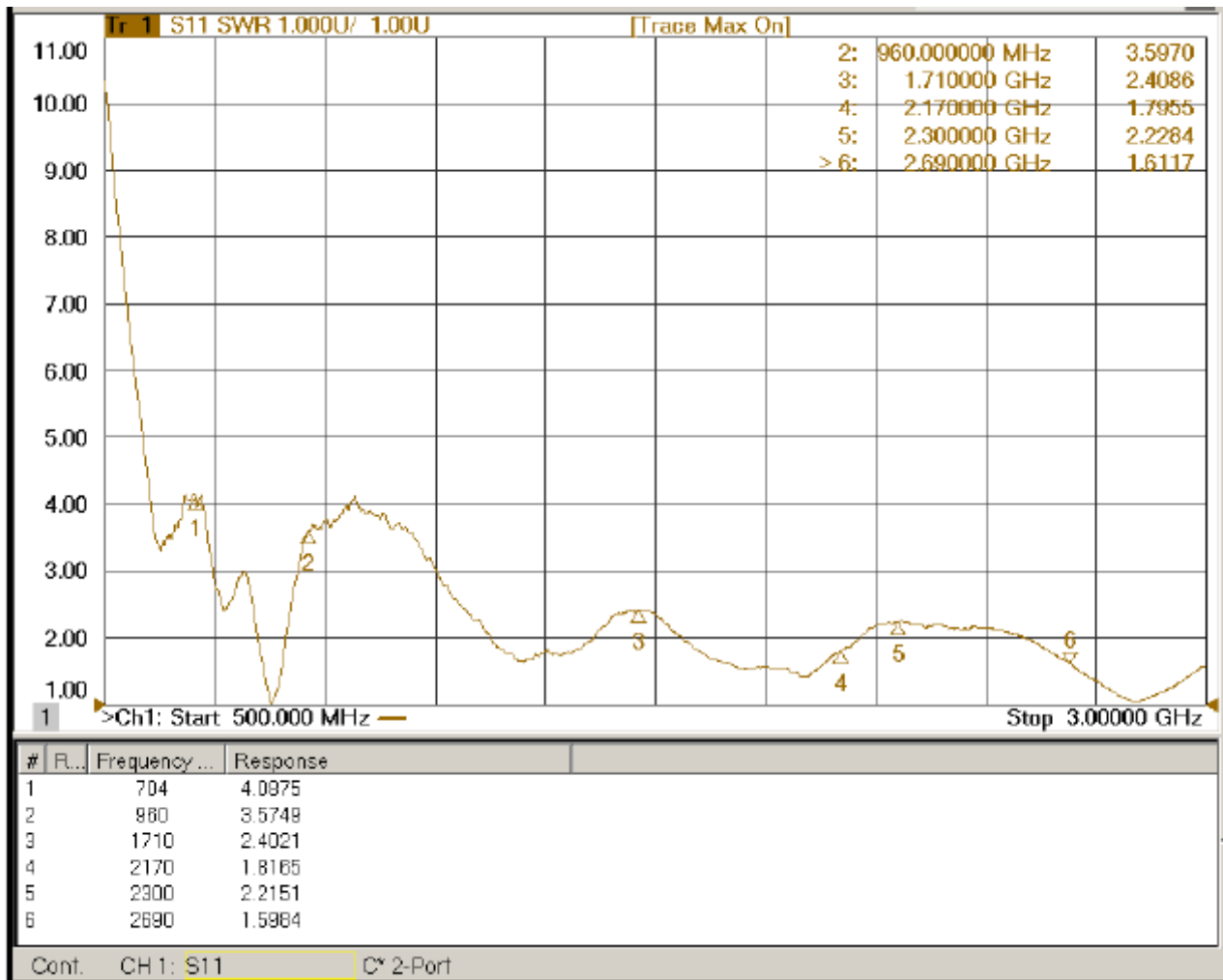
4-4. VSWR

4-4.1 Measuring Method

1. A 50Ωcoaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR
2. Keeping this jig away from metal at least 20cm

4-4.2 Measurement frequency points and VSWR value

Frequency (Unit MHz)		704	960	1710	2170	2300	2690
VSWR	measure	4.0	3.5	2.4	1.7	2.2	1.6



UNLESS OTHER SPECIFIED TOLERANCES ON :
 X=N/A X.X=N/A X.XX=N/A
 ANGLES=N/A HOLEDIA=N/A



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A UNIT : mm
 DRAWN BY : 黃建榮 CHECKED BY : 鄭榮謀
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4-3 Efficiency and Gain

704 ~ 960MHz			1710 ~ 2170MHz			2300 ~ 2690MHz		
Frequency	Efficiency	Peak Gain	Frequency	Efficiency	Peak Gain	Frequency	Efficiency	Peak Gain
MHz	%	dBi	MHz	%	dBi	MHz	%	dBi
704	42.84	0.59	1710	53.21	3.36	2300	55.08	3.22
734	43.42	0.46	1750	55.29	2.48	2340	56.61	4.43
764	44.74	0.25	1790	57.02	2.57	2380	55.79	4.51
794	45.39	0.57	1830	64.42	2.93	2420	55.8	3.86
824	46.11	0.47	1870	63.53	3.32	2460	56.39	2.38
854	45.86	0.36	1910	62.66	3.48	2500	57.51	2.77
884	45.76	0.03	1950	59.98	4.46	2540	56.23	2.91
914	44.33	0.08	1990	59.43	3.65	2580	56.73	2.26
944	42.14	0.14	2030	58.5	3.91	2620	56.16	2.59
960	41.91	0.34	2070	58.2	3.94	2660	55.76	2.8
			2170	54.41	3.92	2690	56.84	3.69

UNLESS OTHER SPECIFIED TOLERANCES ON : X=N/A X.X=N/A X.XX=N/A ANGLES=N/A HOLEDIA=N/A			INPAQ TECHNOLOGY CO., LTD.	
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