

SPECIFICATION FOR APPROVAL

CUSTOMER NAME : QUANTA

DESCRIPTION: DT3 RF BT ANTENNA CABLE ASS'Y

CUSTOMER P/N.:

HON HAI P/N. : WDAN-Q1DT3002

DATE: 11/26 '03

REV : A

PLEASE RETURN TO US ONE COPY OF "SPECIFICATION
FOR APPROVAL" WITH YOUR CONFIRMATIVE SIGNATURES.

SIGNATURES			



Hon Hai Precision Industry Co., Ltd.

FOXCONN COMPUTER CONNECTOR (KUN SHAN) CO., LTD.

No 999 BEIMEN ROAD YUSHAN TOWN

KUNSHAN CITY, JIANGSU PROVINCE

CHINA

TEL: (0520)7790998

FAX: (0520)7790998-2837

UNIFORM INVOICE NUMBER: 04541302

鴻海精密工業股份有限公司

HON HAI PRECISION INC.CO.,LTD.

SPECIFICATION FOR APPROVAL

DESCRIPTION: DT3 RF BT ANTENNA CABLE ASS'Y

CUSTOMER P/N:

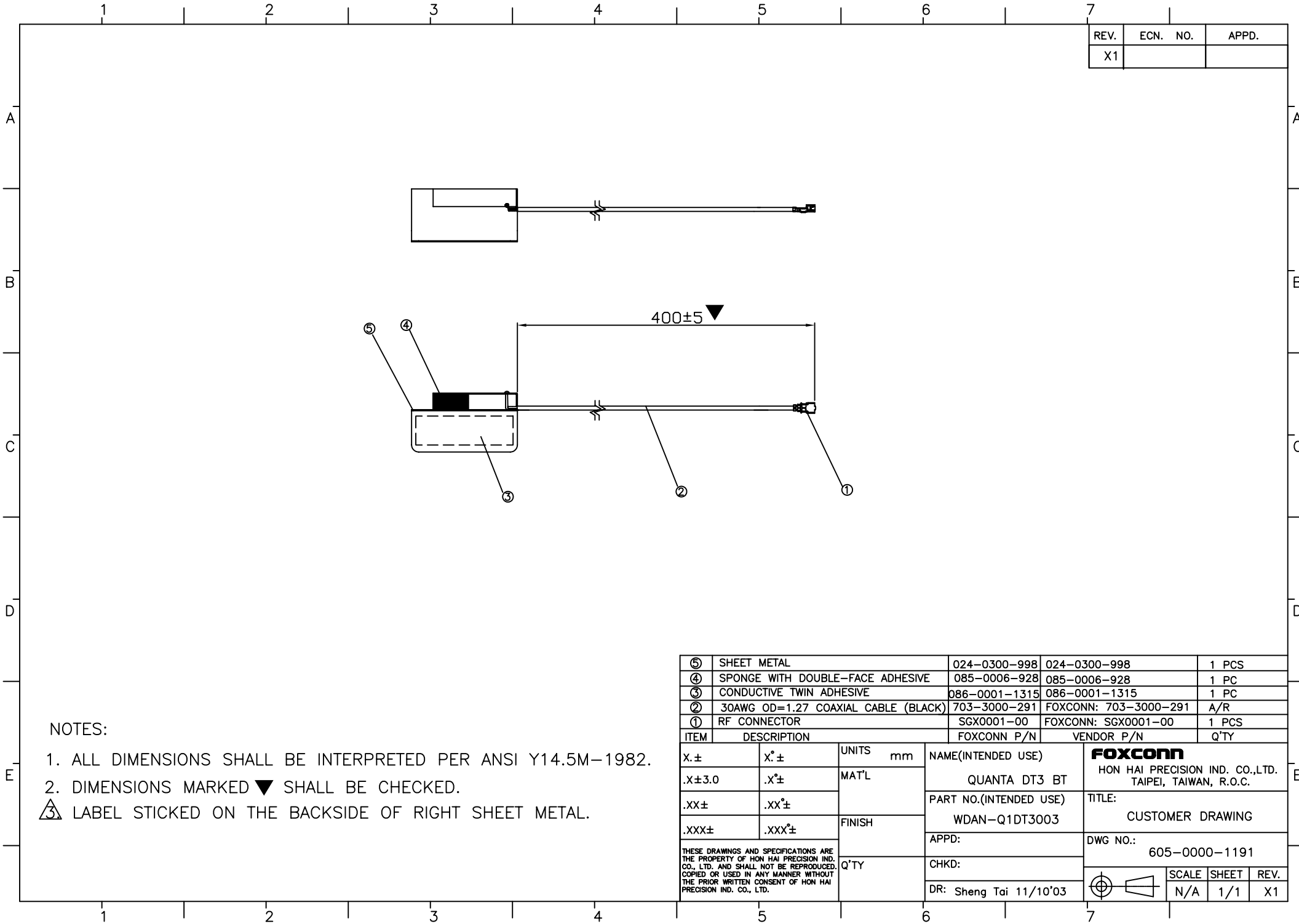
HON HAI P/N: WDAN-Q1DT3002

REV NO: A

ATTACHMENT: 1. CABLE ASS'Y CUSTOMER DRAWING
2. BILL OF MATERIAL FOR P/N

REV.NO.	DATE	CHANGES.	DWG. NO.
X1	11/26 '03		605-0000-1191

R&D		
APPROVED	CHECKED	PREPARED
S.T. Chang 11/26 '03	S.T. Chang 11/26 '03	Paul Zhou 11/26 '03



REV.	ECN.	NO.	APPD.
X1			

NOTES:

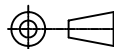
1. ALL DIMENSIONS SHALL BE INTERPRETED PER ANSI Y14.5M-1982.
2. DIMENSIONS MARKED ▼ SHALL BE CHECKED.
3. LABEL STICKED ON THE BACKSIDE OF RIGHT SHEET METAL.

⑤	SHEET METAL	024-0300-998	024-0300-998	1 PCS
④	SPONGE WITH DOUBLE-FACE ADHESIVE	085-0006-928	085-0006-928	1 PC
③	CONDUCTIVE TWIN ADHESIVE	086-0001-1315	086-0001-1315	1 PC
②	30AWG OD=1.27 COAXIAL CABLE (BLACK)	703-3000-291	FOXCONN: 703-3000-291	A/R
①	RF CONNECTOR	SGX0001-00	FOXCONN: SGX0001-00	1 PCS
ITEM	DESCRIPTION	FOXCONN P/N	VENDOR P/N	Q'TY
X.±	X°.±	UNITS	mm	NAME(INTENDED USE)
.X±3.0	.X°.±	MAT'L		QUANTA DT3 BT
.XX±	.XX°.±			PART NO.(INTENDED USE)
.XXX±	.XXX°.±	FINISH		WDAN-Q1DT3003
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HON HAI PRECISION IND. CO., LTD. AND SHALL NOT BE REPRODUCED, COPIED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF HON HAI PRECISION IND. CO., LTD.		Q'TY	CHKD:	TITLE:
			DR: Sheng Tai 11/10'03	CUSTOMER DRAWING
				DWG NO.: 605-0000-1191
				SCALE SHEET REV.
				N/A 1/1 X1

NOTES:

1. ALL DIMENSIONS SHALL BE INTERPRETED PER ANSI Y14.5M-1982.
- 2.HARMFUL MATERIAL CONTROL PLEASE FOLLOW DOC.NO."EPI12".
- 3.AL FOIL DOUBLE BACK ADHENSIVE CONDUCTIVE, TOTAL THICKNESS IS ABOUT 0.1MM
- 4.ALL DIMENSION MARKED ▼ WILL BE CHECKED.

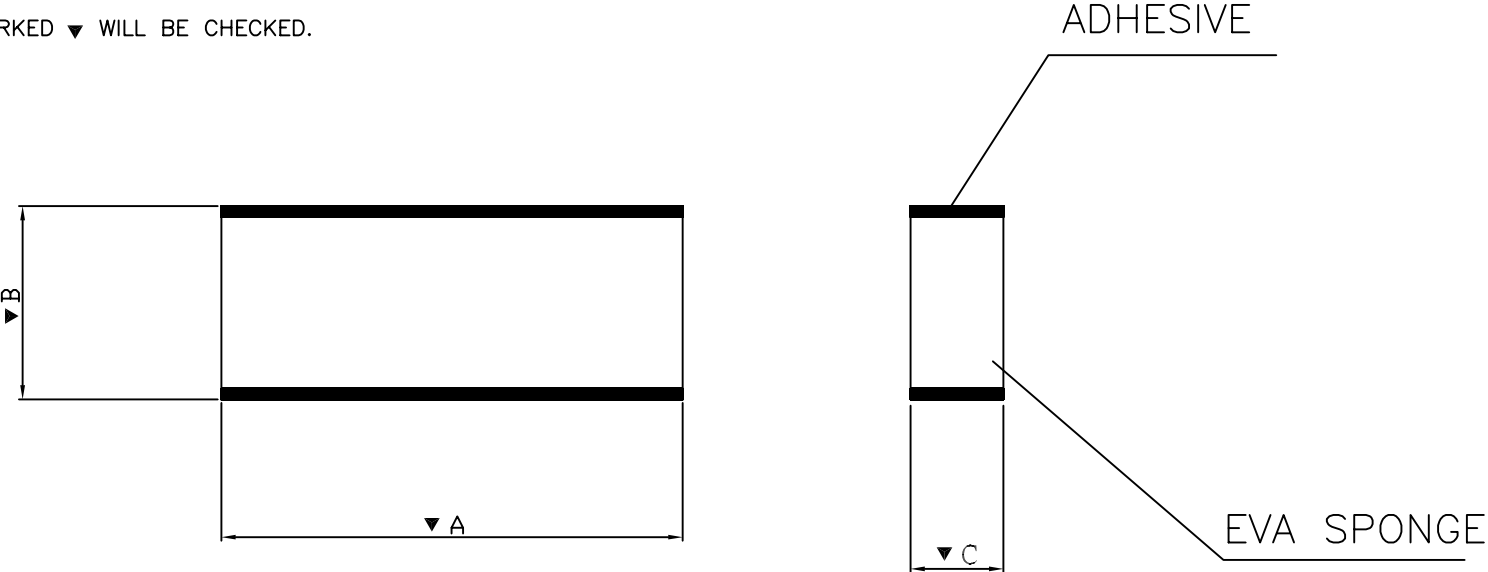


X.± 1	X°.±	UNITS	mm	NAME(INTENDED USE)	FOXCONN			
.X±0.3	.X°.±	MAT'L		DOUBLE CONDUCTIVE TAPE	HON HAI PRECISION IND. CO.,LTD. TAIPEI, TAIWAN, R.O.C.			
.XX±	.XX°.±			PART NO.(INTENDED USE)	TITLE:			
.XXX±	.XXX°.±	FINISH		085-000*-1315	DOUBLE CONDUCTIVE TAPE			
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HON HAI PRECISION IND. CO., LTD. AND SHALL NOT BE REPRODUCED, COPIED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF HON HAI PRECISION IND. CO., LTD.				APPD: S.T Chang 11/14 '03	DWG NO.: 086-0000-1315			
				Q'TY	CHKD:S.T Chang 11/14 '03			
				DR: Paul Zhou 11/14 '03	SCALE			
					N/A	1/1	X1	

NOTES:

- 1. ALL DIMENSIONS SHALL BE INTERPRETED PER ANSI Y14.5M-1982.
- 2.HARMFUL MATERIAL CONTROL PLEASE FOLLOW DOC.NO."EPI12".
- © 3.PA1雙面EVA DOUBLE BACK ADHENSIVE 3M467
- 4.ALL DIMENSION MARKED ▼ WILL BE CHECKED.

REV.	ECN. NO.	APPD.
A	BC0351258	C.C Wang
B	BC0374141	S.T.Chang
C	BC0375869	S.T.Chang
D	BC0385628	S.T.Chang



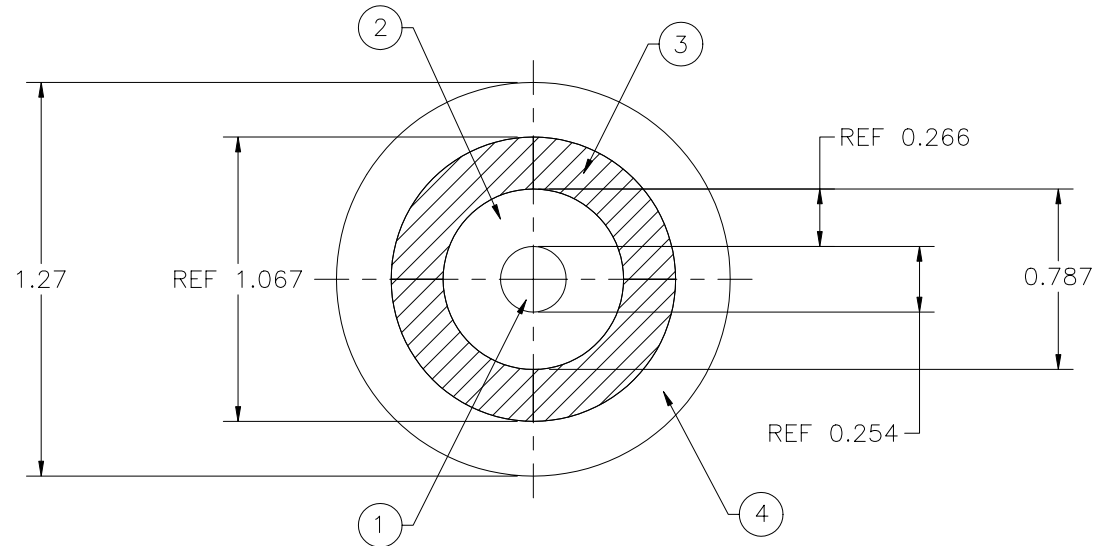
③	3.	085-0005-928	10.0	4.3±0.2	4.8	DT3
④	4.	085-0005-928	10.0	3.8±0.2	2.0	PA1
	3.	085-0004-928	11.1	3.9±0.2	3.5	EW1
	2.	085-0003-928	13.0	4.1±0.3	2.5	DT1
	1.	085-0002-928	10.0	4.40±0.2	2.5	OA2,OA5
	ITEM	PART NO.	DIMENSION A	DIMENSION B	DIMENSION C	REMARK
	X.±	X°.±	UNITS mm	NAME(INTENDED USE)	FOXCONN HON HAI PRECISION IND. CO.,LTD. TAIPEI, TAIWAN, R.O.C.	
	.X±0.3	.X°.±	MAT'L	PART		
	.XX±	.XX°.±		PART NO.(INTENDED USE)	TITLE:	
	.XXX±	.XXX°.±	FINISH	085-000*-928	EVA SPONGE	
	THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF HON HAI PRECISION IND. CO., LTD. AND SHALL NOT BE REPRODUCED, COPIED OR USED IN ANY MANNER WITHOUT THE PRIOR WRITTEN CONSENT OF HON HAI PRECISION IND. CO., LTD.			APPD: S.T.Chang 11/27'03	DWG NO.: 085-0000-928	
			Q'TY	CHKD: S.T.Chang 11/27'03		
				DR: Paul Zhou 11/26'03		
					SCALE	SHEET
					N/A	1/1
					REV.	D

ELECTRICAL		
IMPEDANCE	50	ohms
CAPACITANCE	30.5	pF/ft
CONDUCTOR RESISTANCE	860	ohms/KM

FREQUENCY (MHz)	ATTENUATION (dB/10ft)
500	3
1000	5
2000	8
3000	10

RATINGS	
TEMPERATURE:	200°C/105°C
VOLTAGE:	30V
UL STYLE:	1894/1943

REV	ECN No.	APPD.	DATE
A	MC-01-0847	VINCENT	3/28'01
B	MC-01-0847	ALLEN	4/13'01
C	MC-01-1942		



NOTES

- 1.PRIMARY INSULATION CONCENTRICITY = 85% MIN.
2. NN : JACKET COLOR CODE
00--BLACK 01-BROWN 02-RED 03-ORANGE
04-YELLOW 05-GREEN 06-BLUE 07-PURPLE
08-GRAY 09-WHITE 10-CLEAR 99-NATURAL
- 3.BRAIDING COVERAGE TO BE 95 % MIN.
- 4.DIELECTRIC STRENGTH:1.25KVAC/min
- 5.JACKET CONCENTRICITY = 80% MIN

4	A/R	902-***1-*24	JACKET INSULATION, FEP #
3	A/R	904-44**-616	6ENDS/ 44 AWG TINNED PLATED BRAIDING
2	A/R	902-***1-*24	PRIMARY INSULATION, FEP #
1	A/R	904-30**-851	30 AWG, SOLID SILVER PLATED COPPER CLAD STEEL
ITEM	QTY	PART No.	DESCRIPTION
BILL OF MATERIALS			
		UNITS mm	NAME(INTENDED USE)
		MATERIAL	COAXIAL CABLE
		SEE BOM	PART No.(INTENDED USE)
		FINISH	703-30NN-291
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		QTY	CHECKED :Chris Zhou 12/6'01
			DRAFTER : 項歌學
			FOXCONN HON HAI PRECISION IND. CO.,LTD.
			TITLE: RF CABLE 30 AWG, CONSTRUCTION
			DWG No. 703-3000-291
			SCALE SHEET REV. NONE 1/1 C

1. EVA 材料成份报告表

EVA (塑胶粒) 30%	乙烯醋酸 乙烯酯树脂
PE (塑胶粒) 45%	高密度乙烯
GG3 (碳酸钙) 15%	碳酸钙
AC (发泡剂) 7%	发泡粉
DCP (架桥剂) 3%	安定剂

2. 应用

- (1. 避震
- (2. 缓冲

3. 物性

品名	RUBBER FOAM A-803B100	ETHULENE VINYE A030 / A055	ACEATE FOAM A-VSI00F
物性			
密度 KG/CM ³	0.15-0.2	0.25 0.45	0.07-0.09
吸水率 %	5%	1	
压缩硬度 PSI	3-4PSI	C Typo30 50	ASTM 2.5-3.5
压缩率 %	15-20%	25	ASTM 350
抗张强度	4-5.5kg/cm	5 2	ASTM 3
伸张率 %	300-350	140 60	ASTM 300
撕裂强度	2-2.5KG/CM	4 7	ASTM 3
耐热收缩率 %	5	1.5 2	5

4. 公差范围:

1—4mm	公差值为 $\pm 0.20\text{mm}$
4—8 mm	公差值为 $\pm 0.35\text{mm}$



降揚電子(昆山)有限公司
江蘇省昆山高科技工業園順興路99號

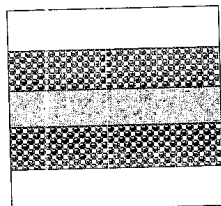
Long Young Electronics Co., Ltd.
Tel : (0512) 5766-990 Fax : (0512) 57669300

LQ-232 双面導電铝箔膠帶 Aluminum Foil Tape

簡要說明

双面導電铝箔膠帶是銅箔覆以丙烯酸粘著劑均勻塗布，粘著面以离型紙貼合。
表層是高等電性的銅箔，提供最佳的導電性和屏蔽效果，適合各類電子產品的廣泛應用。
双面導電铝箔膠帶在100KHz到10GHz的頻率範圍可得到良好的屏蔽效果。

剖面圖 Cross Section



Release Paper
Conductive Adhesive
Aluminum Foil
Conductive Adhesive
Release Paper

1. 材質 Material & Construction

項目	材質	厚度	說明
Base Material	Aluminum Foil	0.035±0.005mm	
Adhesive	Acryl Conductive Adhesive	0.035±0.005mm	
Adhesive	Acryl Conductive Adhesive	0.035±0.005mm	
Release Paper		0.20±0.02mm	

2. 導電膠成分 Conductive Adhesive Resin Composition

- ◆ The Principal Ingredient (Adhesive Resin): Acrylic Copolymer
- ◆ Modified Chemical Material: Modified Nickel & Carbon Pigment Brominated Compound Liquid

3. 特性 Characteristics

項目	單位	結果	說明
Adhesive Strength (180° peel)	kg/inch	≥ 0.8	在25℃貼合後放20分鐘，180度方向拉張速度±0.3mm/minute
Holding Power	mm/h	≤ 0.2	對SUS 304 Plate, 1kg/inch
Surface Resistivity	Ω/□	≤ 0.04	at 5kg, MIL-G-83528B

4. 低溫狀態下之使用條件:

膠帶于自然環境低溫狀態下必須使用時，需將膠帶回溫至室溫（約20℃）三小時以上再行使用。

5. 包裝:

膠帶制品以包裝紙或收縮膜包裝完成，并裝于適當之紙箱內。

6. 保存:

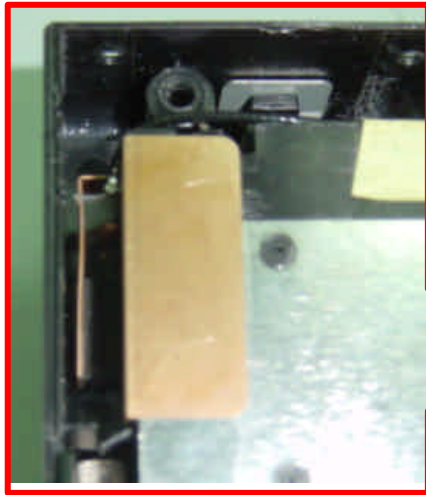
膠帶應放置于阴凉处，避免高温高湿或日晒以妥為保管下，品質保證期間為製造後六個月。

FOXCONN NWInG

Antenna Engineering Test Report

Quanta DT3 BT Antenna

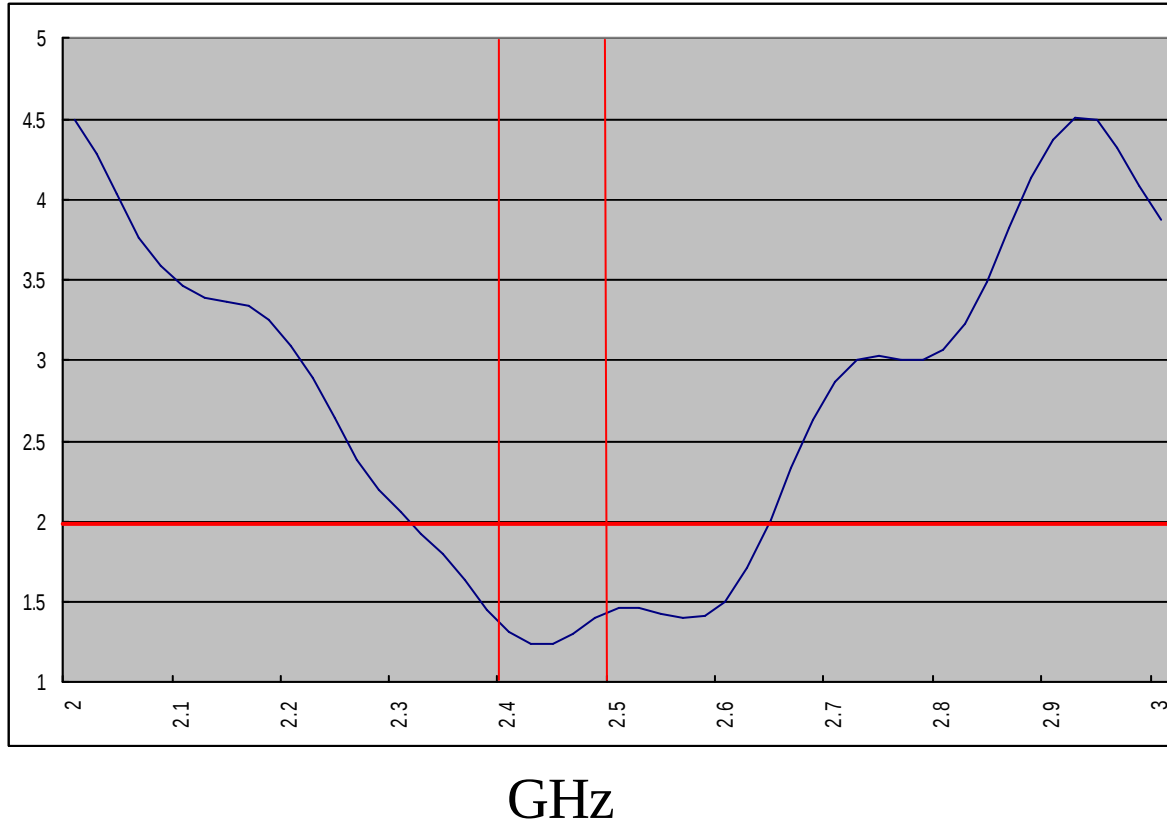
Antenna Location Photo



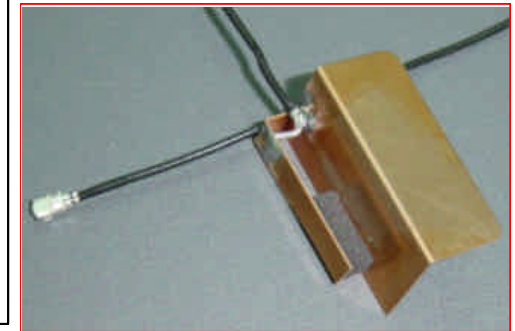
PIFA Type Antenna



VSWR of Antenna



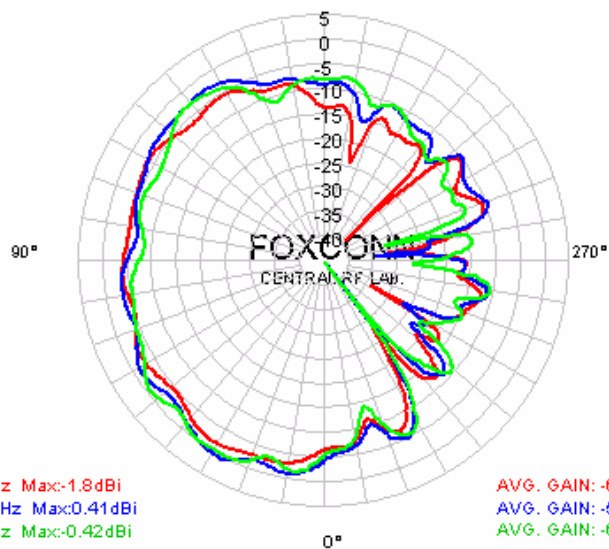
2.4GHz = 1.30
2.45GHz = 1.24
2.5GHz = 1.47
OD=1.25mm
30AWG Cable
Length=450mm



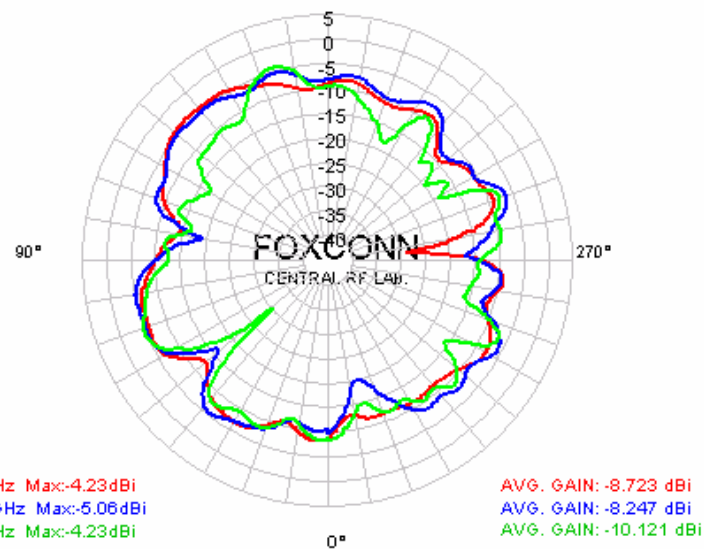
X-Z Plane Radiation Pattern of Antenna

2.4GHz ~ 2.5GHz

HORIZONTAL POLARIZATION



VERTICAL POLARIZATION



X-Y Plane Gain of Antenna (2.4GHz ~ 2.5GHz)

Average Gain

Freq.(GHz)	2.4	2.45	2.5
XY-H(dBi)	-6.93	-5.53	-6.26
XY-V(dBi)	-8.72	-8.24	-10.12
XY-Avg.-Gain	-4.72	-3.67	-4.76

Peak Gain

Freq.(GHz)	2.4	2.45	2.5
XY-H(dBi)	-1.80	0.41	-0.42
XY-V(dBi)	-4.23	-5.96	-4.23