



Network Systems Organization

Federal Communications Commission
Equipment Approval Services
P.O. Box 358315
Pittsburgh, PA 15251-5315

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San Jose, CA 95119-1208
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Re: FCC ID H9PLA3021-100 Ref # 15534

Date: 10/12/00

Dear Reviewer,

In response to the following Email:

Re: FCC ID H9PLA3021-100

Applicant: Symbol Technologies Inc

Correspondence Reference Number: 15534

731 Confirmation Number: EA97674

Date of Original E-Mail: 08/10/2000

1. Cover letter indicated this Class II Permissive Change filing is adding 4 antennas, the EMC report is indicating 5 antennas and the MPE info has included 10 antenna configurations with 5 of those have multiple connector configurations (a total of 15 configurations). Please clarify how many antenna configurations are applicable for this filing.

The cover letter has a typo. It should have stated 10 antenna configurations. Per prior correspondence with the FCC it was determined that only the antenna with the highest gain for each type needed to be tested. The TR Status (Test Report Status) column for each antenna either refers you to the test report for its data (tested) or to the higher gain antenna of the same type for its test data (See # X). The LA-3021-100 only uses the MMCX connector for a total of 10 antenna configurations.

At this time I wish to append three more antenna configurations to bring the total to 13. I have appended the antenna MPE information for [antenna # 11](#), [antenna #12](#), and [antenna #13](#) to this document as well as supplied a new RF Exposure [summary table](#) that includes all 13 antennas. I have also uploaded the test report that covers these three new antennas.

In addition I am including a [configuration table](#) that shows all 13 antenna / terminal configurations in this application.

2. The antenna list indicates the Rubber Duck antenna is for vehicle-mount use. MPE info indicates this antenna is for incorporation into hand-held devices. Please clarify the antenna configuration and state the actual devices that will be operating with this antenna configuration.

while the RP-TNC version is on the vehicle-mounted terminal. The rubber duck with the RP-BNC is currently certified under this FCC ID in a mobile device configuration. We want to add the vehicle mount configuration for the RP-TNC connector version. I have included a corrected version of the [Antenna #1 MPE](#) info.

3. Specs for the Toko antenna has 2.15 dBi peak gain, which should be used for MPE estimations instead of the 0 dBi typical gain.

The 2.15 dBi figure in the data sheet is with the shown optimum ground plane. For the hand held device with a sub-optimum ground plane 0 dBi is the max with -4 dBi being typical. See the attached [Antenna #5 polar plot](#).

4. The RF exposure statement for the "Vocollect" antenna needs revision. This antenna is only applicable to the specific belt-worn configuration and output power described for this filing. Users should be instructed to use this antenna and belt-worn configuration in specific manners (as described in the manual and this filing) for satisfying FCC RF exposure compliance. Please revise and upload relevant page(s) of the manual for this antenna configuration.

Attached is [Antenna #4 MPE](#) exhibit that includes the language added to the user information.

5. There is a 68% duty factor applied to the two body-worn configurations. Please verify if this duty factor had been included in the original filing and explain why would different duty factors be applied to mobile and portable devices. Only source-based time-averaging factors may be used, please provide the applicable information to qualify for source-based time averaging.

Please see the uploaded proprietary Duty Cycle exhibit.

6. Please provide the actual separation distance between the "Oniel" antenna and a user's body when the printer containing this antenna is carry next to its user. The proposed RF exposure statement needs revision. The device must be operated in body-worn configurations as described for this filing for satisfy FCC RF exposure compliance. Please revise accordingly and upload relevant page(s) of the manual.

The O'Neil antenna is a minimum of 2.2 cm away from the users body when clipped on the users belt. Attached is an updated [Antenna # 6 MPE](#) exhibit.

Note: Output is 112 mW.

I hope these answers are satisfactory.

Respectfully,

Norman H. Nelson

Rubber Duck Antenna

The **Rubber Duck** antenna is 1 dBi omnidirectional in azimuth plane. It is mounted either on the rear end of the fixed mouted terminal or on the top end of the vehicle mounted terminal as shown in the attached photos. The fixed terminal is mostly wall mounted but could be on a flat surface more than 20 cm from any user. The fixed mounted terminal uses a BNC-RP connector while the vehicle mounted terminal uses the TNC-RP. In its use on the vehicle mounted terminal it could be within 20 cm of a persons hand but more than 20 cm from the users body. It is used in mobile devices. The RF exposure information is included in a prominent place in the device's user manual and is listed next to the configuration photographs.

<i>Location</i>	Wall / Vehicle Mount
<i>Pattern</i>	Omni
<i>Type</i>	Dipole
<i>Max Gain</i>	1 dBi
<i>Physical</i>	See attached dwg
<i>Cable</i>	none
<i>Symbol P/N</i>	ML-2499-APA1-00 ML-2499-APA2-00



Antenna Photograph



1380

Vehicle mounted device Photo

“CAUTION: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this antenna shall be installed in such a manner that it may be located near hands but must be more than 20 cm from any persons body during normal operating conditions.”

RF Safety information



Fixed mounted device Photo

“CAUTION: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this antenna shall be installed to ensure a minimum separation distance of 20 cm from all persons during normal operating conditions.”

RF Safety information

[illegible]

THE FOLLOWING STI SPECIFICATIONS APPLY:

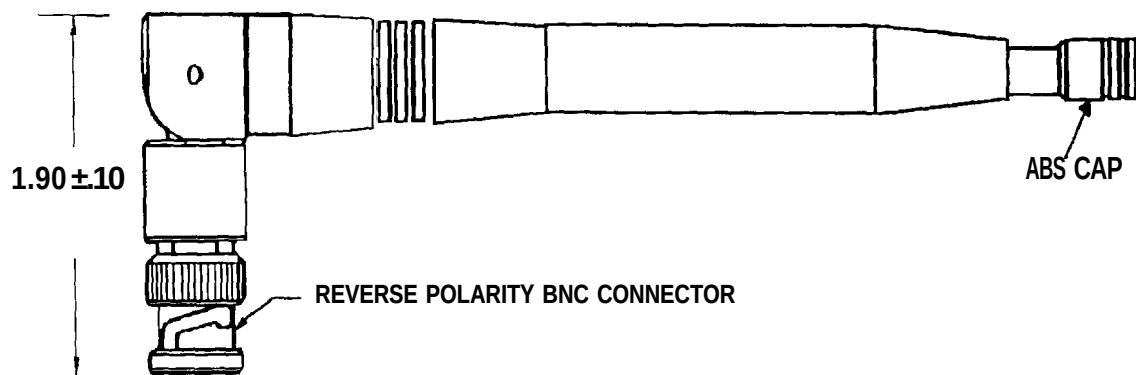
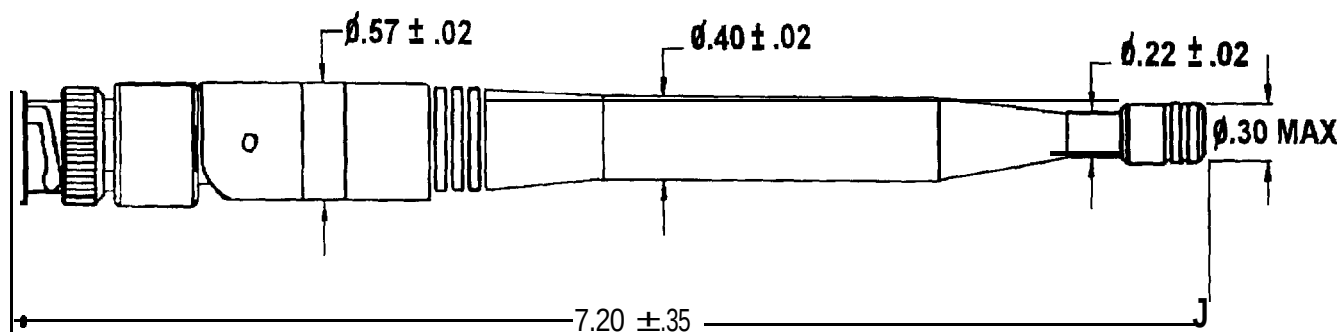
EN-I 0983-01 General Component Requirements

RELEASED

®

This document and specification contained herein must not be used, copied, reproduced, or otherwise dealt with nor its contents communicated to others except in accordance with written instructions received from Symbol Technologies, Inc.

APPROVAL	NAME	DATE	COMPONENT SPECIFICATION	
DRAWN	D.FORTIER	7/ 1/96	ANTENNA:RADIO,FLEX, 2.4-2.5GHz *REVERSE POLARITY BNC,50 OHM, ARTICULATE JOINT	
CHECKED	M.WELLS	7/26/96		
ENG	M. POPE			
CEG	T.SMURA	7/30/96	DOCUMENT No. 50-21900-007	REV B
				SHEET 1 of 2



DRAWING NOT TO SCALE

Bandwidth:	2.4 to 2.5 Ghz
VSWR:	1.5:1 Max. at resonance
Gain:	1.0 dBi
Power Rating:	50 Watts
Torque Test:	20 in-lbs.
Operating Temperature:	-40° - +85°C
Flex Test:	Per QEA0014
Pull Test:	20lbs Liner Pull

Dimensions are in inches unless otherwise noted

Tolerances are as follows $\text{XX} \pm .010$ unless otherwise noted.

SYMBOL TECHNOLOGIES, INC.

DOCUMENT No.50-21900-007

REV B

SHEET 2 of 2

Vocollect Antenna

The **Vocollect** antenna is 2 dBi omnidirectional in azimuth plane. It is mounted internally as shown in the attached photo. The **Vocollect** uses either a Murata Erie BFA or a MMCX connector. In its use it would be within 5 cm of a persons body. It is used in portable devices. This antenna / device combination was SAR tested and results filed with a Class II permissive change for the H9PLA3020. The antenna was driven by 240 mW of transmitter power. This produces an EIRP limit of 380 mW. Below is the user safety information located in the users manual.

<i>Location</i>	Body worn device
<i>Pattern</i>	Omni
<i>Type</i>	Dipole
<i>Max Gain</i>	2 dBi
<i>Physical</i>	See attached dwg
<i>Cable</i>	MXYPH75, RG-178
<i>Symbol P/N</i>	50-21900-025, 50-21900-026

“Warning: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this device shall be used in accordance with the operating conditions and instructions listed in this manual.”



Antenna Photo

Talkman Open – 2.4 GHz Symbol Radio Information

Vocollect Antenna Specifications

Type:	Dipole
Gain:	2 dBi
Polarization:	Circular
Physical description:	Implemented on flat and rigid printed circuit board, internally mounted, parallel to the belt mounting loop.
Min distance from skin:	2.1 inches (1.70 inches to inside to belt loop plus 0.40 inches of padded belt)

Table 1: Bill of Materials- Talkman Open – Symbol Radio and Antenna

Item	Qty	Vocollect Part #	Vendor Part #	Supplier	Description
1	1	656022		Austin Antenna	ANTENNA PCB
2	1	606012	90174601	Huber-Suhner	CABLE ASSY, ANTENNA

Image 1: 2.4 GHz Antenna PC Board

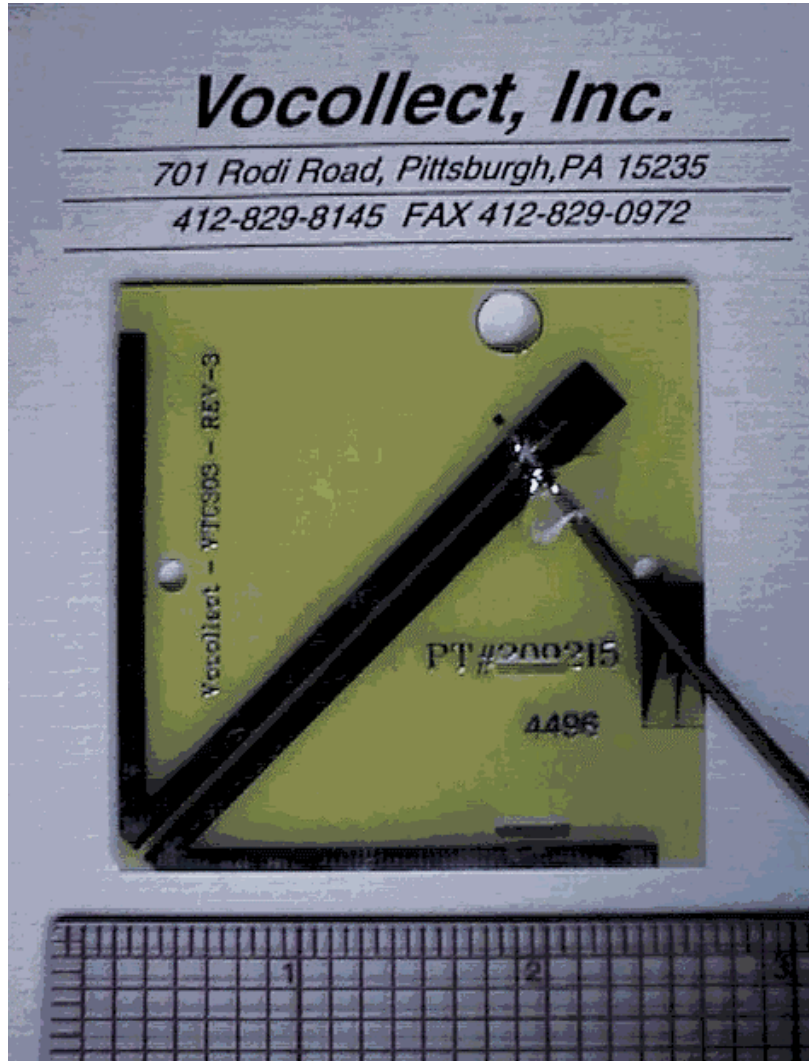


IMAGE 2: Beltworn Terminal - Drawing



IMAGE 3: Beltworn Terminal

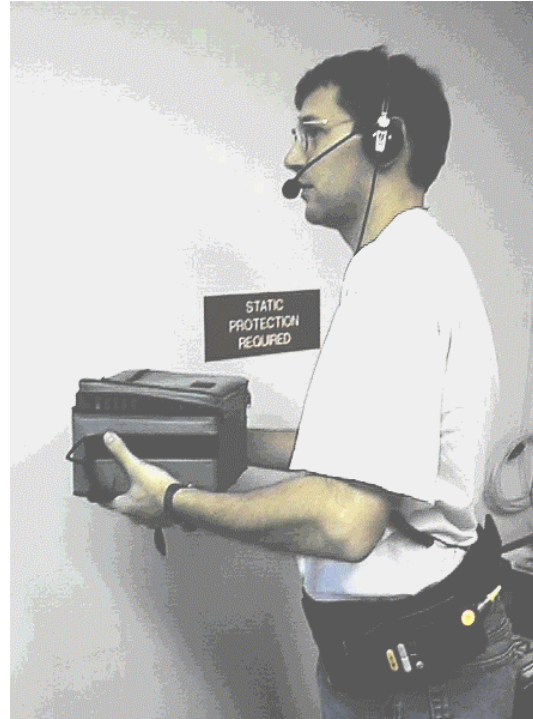


IMAGE 4: Drawing of Antenna Placement Inside Unit.

The antenna is mounted in the plane parallel to the belt loop and waist, 1.70 inches away from the belt loop used to connect the terminal to the padded mounting belt. Including the belt thickness, the radio is at least 2.1 inches distant from the skin.

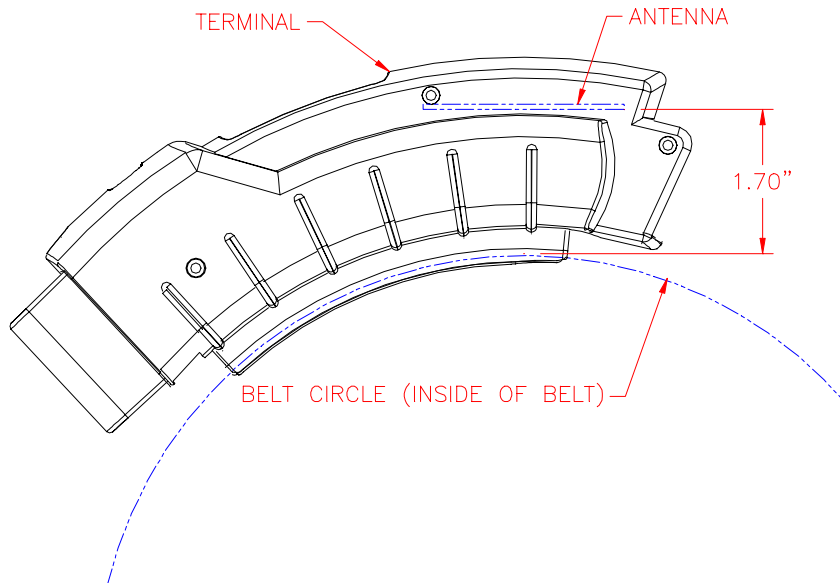


IMAGE 5: The unit mounts on a padded belt ½" thick.

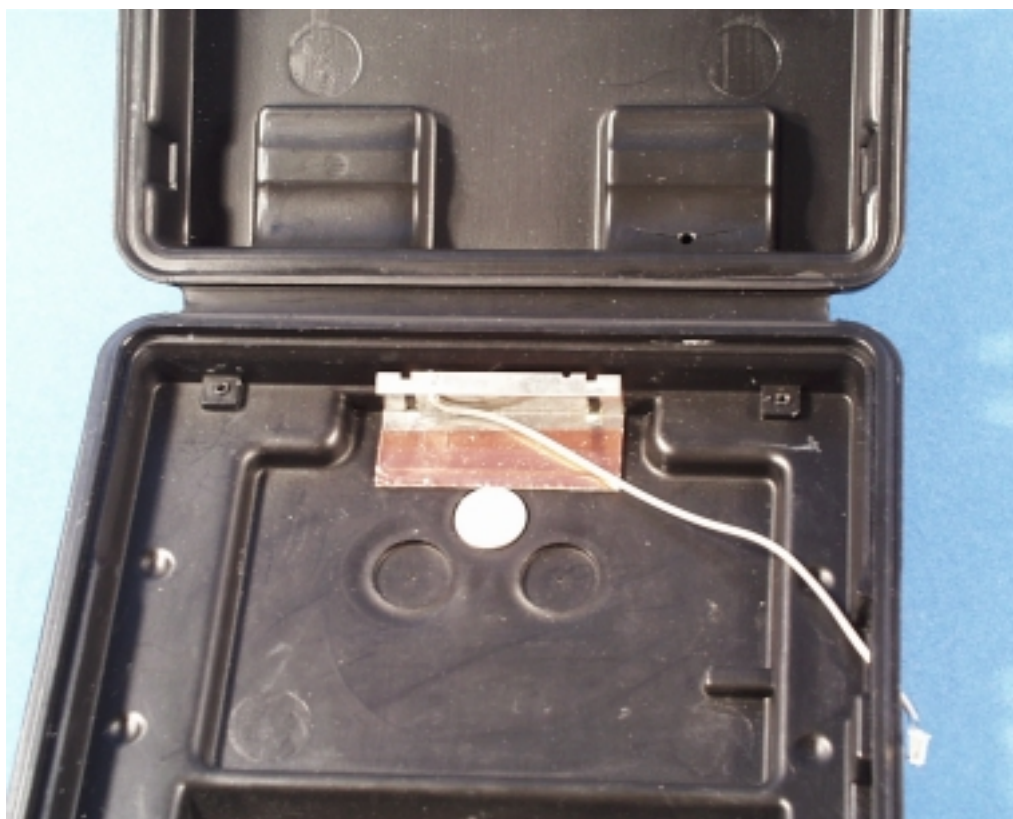
The unit is connected to the belt by a secondary strap secured to the belt. The full width of the main padded belt remains between the terminal and user's body.



Oneil BFA / Oneil MMCX Antenna

The **Oneil** antenna is 0 dBi omnidirectional in azimuth plane. It is available with either a MuRata BFA or MMCX connector. It is mounted as an internal antenna on the O'Neil MicroFlash series of portable belt worn printers. In its use it could be as close as 2.2 cm of a users body. It is used in portable devices.

<i>Location</i>	Body worn
<i>Pattern</i>	Omni
<i>Type</i>	Slot
<i>Max Gain</i>	0 dBi
<i>Physical</i>	See attached dwg
<i>Cable</i>	MXYP75 or RG-178
<i>Symbol P/N</i>	50-21900-023 50-21900-031
<i>EIRP</i>	See Summary Tbl



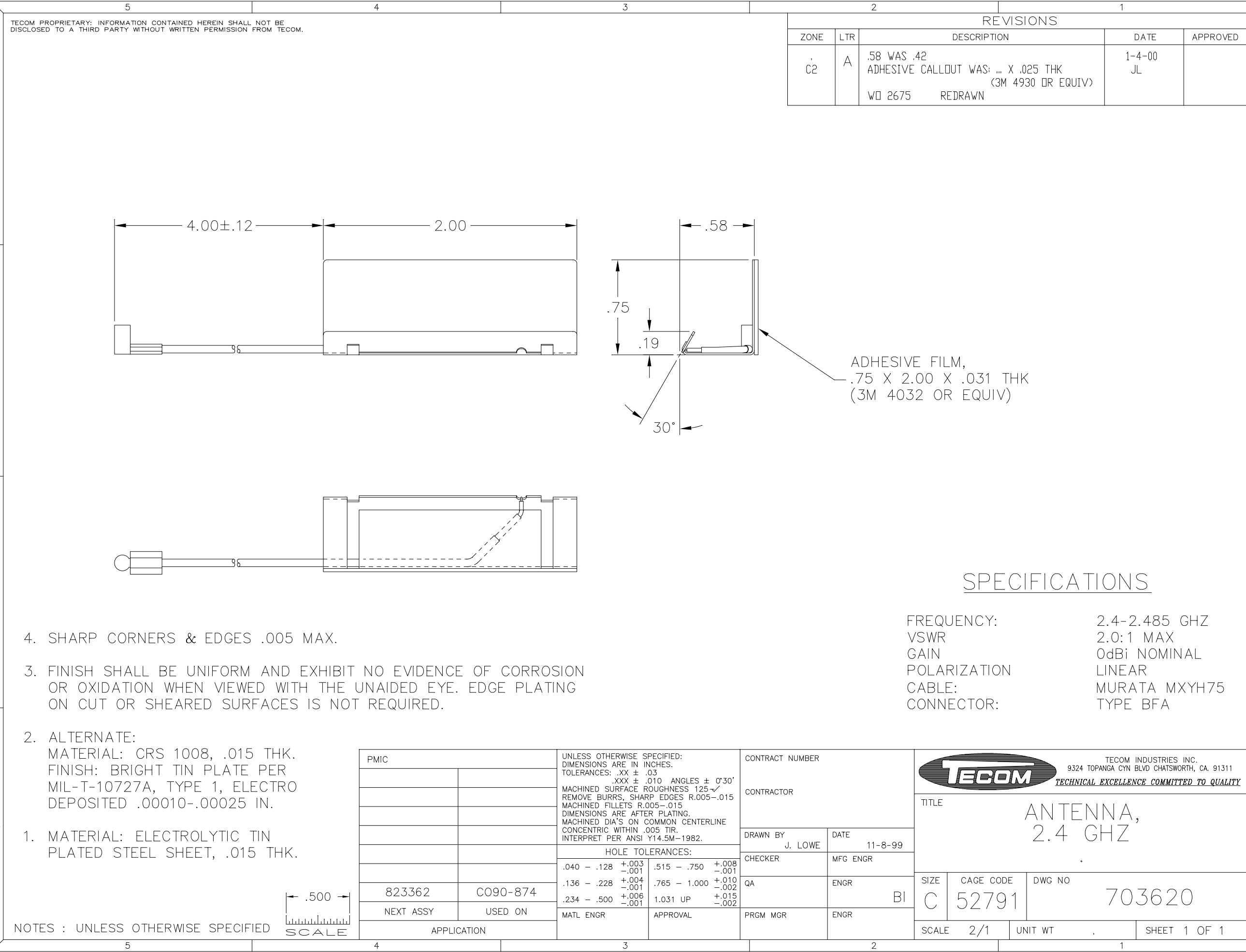
Antenna Installation Photo



Device use Photograph.

The following text will be located in a conspicuous place in the section describing proper positioning and operation of the body worn device.

“Warning: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this device shall be used in accordance with the operating conditions and instructions listed in this manual.”



Data



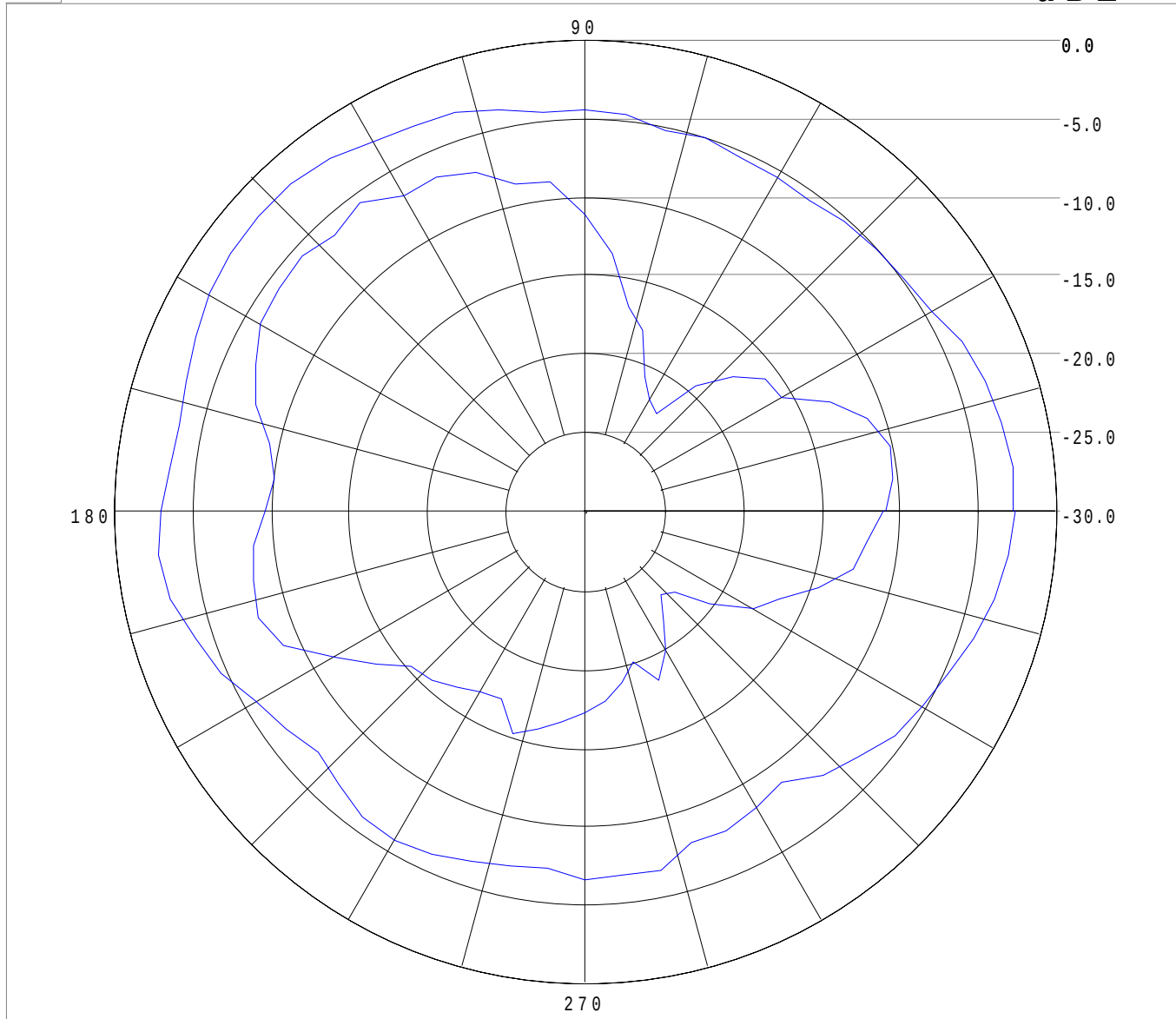
Path: g:\Labview\data1\Norm\Toko\Toko Antenna.dat

Records: 6

6/22/99 8:43:08 AM

PEP

dB*i*



Run Info

Model	Toko Antenna	S/N	
Version	Antenna Test Fixture		
Ft(MHz)	2440	Harmonic	Fund.
		Polarity	Vert

Scale Max

0.00

Scale Min

-30.00

◀	◀	Rec No.	▶	▶
		3		

6/22/99 8:58:37 AM

Peak	mean	%
-1.90	-6.88	66

dB*i*

6140 / 6146 Antenna

The 6146 antenna is 0 dBi omni-directional in azimuth plane. It is mounted internally on the top end of the terminal as shown in the attached photo. The 6140 uses the Muratta Erie BFA connector. The 6146 uses the MMCX connector. In its use it would be within 20 cm of a persons hand but more than 20 cm from the users body. It is used in portable devices. The following RF exposure information is included in a prominent place in the device's user manual to inform the user of safety issues as required by OET Bulletin 65, Supplement C for EIRP greater than 200 mW.

<i>Location</i>	Hand Held Device
<i>Pattern</i>	Omni
<i>Type</i>	F-Element
<i>Max Gain</i>	0 dBi
<i>Physical</i>	See attached dwg
<i>Cable</i>	MXYP75, RG-178
<i>Symbol P/N</i>	10-35305-01, -02

"CAUTION: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this hand held device is only approved for use in the user's hand when there is 20 cm or more between the antenna and any persons body during normal operating conditions."

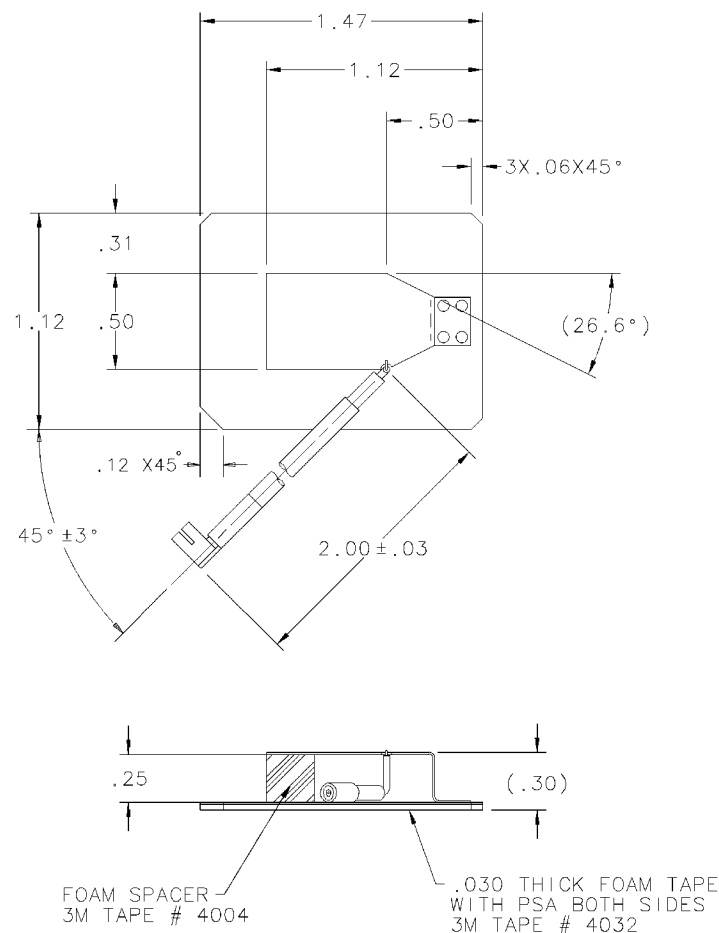


Antenna Installed in Device



Terminal Use Photo

REVISIONS						
REV.	ZONE	DESCRIPTION	E.C.	BY	APVD.	DATE
A		RELEASED PER EDR #40629		LM		6-26-98
B		REVISED PER EC #E5139		MB		9/15/98
C		REVISED PER EC #E5338		JKW		10/5/98



SPECIFICATIONS

FREQUENCY: 2400-2485 MHz
VSWR: 2:1
GAIN: 0dbi NOMINAL

CABLE/ CONNECTOR: TECOM 817283-19
MXVH62XXXXXXX

NOTES: UNLESS OTHERWISE SPECIFIED:

- MATERIAL: CRS 1008, .010±.001 THICK.
- FINISH: BRIGHT TIN PLATE PER MIL-T 10727A, TYPE 1 ELECTRO DEPOSITED .00010-.00025 INCHES. FINISH SHALL BE UNIFORM AND EXHIBIT NO EVIDENCE OF CORROSION OR OXIDATION WHEN VIEWED WITH THE UNAIDED EYE. EDGE PLATING ON CUT OR SHEARED SURFACES IS NOT REQUIRED.
- BREAK AND DEBUR ALL SHARP CORNERS AND EDGES .005 MAX PRIOR TO PLATING.
- OPERATING TEMPERATURE: -20 TO +50°C. STORAGE TEMPERATURE: -40 TO +70°C. HUMIDITY: 95% NON CONDENSING
- PACKAGE ITEMS IN ACCORDANCE WITH STI GENERAL PACKAGING SPEC #50-04100-013.

ITEM	QTY.	PART NO.	DESCRIPTION	REMARKS/REF. SYMBOL														
THE DWG. & SPECIFICATION CONTAINED HEREON ARE PROPRIETARY AND MUST NOT BE USED, COPIED, REPRODUCED NOR ITS CONTENTS COMMUNICATED TO OTHERS EXCEPT IN ACCORDANCE WITH WRITTEN INSTRUCTIONS RECEIVED FROM SYMBOL TECHNOLOGIES INC.																		
					DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED		APPROVALS	DATE	SYMBOL TECHNOLOGIES INC. Bohemia, New York									
							DRAWN	LJM		1/22/98								
					<table><tr><td></td><td>MM</td><td>INCH</td></tr><tr><td>.XX</td><td>±.1</td><td>±.01</td></tr><tr><td>.XXX</td><td>±.1</td><td>±.005</td></tr></table>			MM	INCH	.XX	±.1	±.01	.XXX	±.1	±.005	CHECKED	F GONG	ANTENNA: TYPE F,S24, COBALT
								MM	INCH									
					.XX	±.1	±.01											
					.XXX	±.1	±.005											
					ENGINEER	F GONG												
					ANGLES ± 1° FRACTIONS ± 1/64		MFG. ENG. F MAZURKIEWICZ		SIZE C	DWG. NO. 10-35305-01	REV. C							
							PRODUCT T HOFBAUER											
MATERIAL: SEE NOTE		QUALITY		SCALE: 2/1	SOLID MODEL	YES NO	X	SHEET 1 OF 1										
		FINISH: SEE NOTE																

NEXT ASSY	USED ON	DO NOT SCALE DRAWING

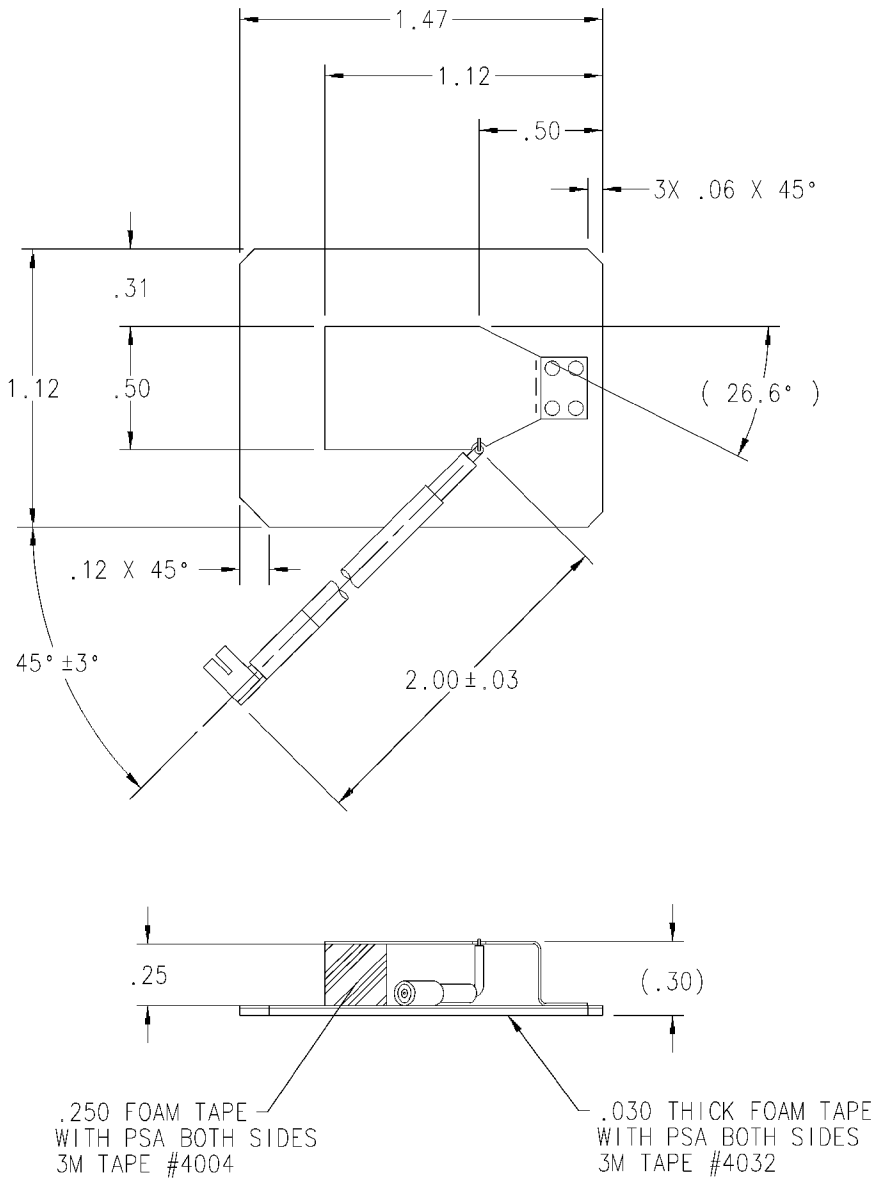
4

3

2

1

REVISIONS							
REV.	ZONE	△No.	DESCRIPTION	E.C.	BY	APVD.	DATE
A			RELEASED PER EDR #53453		JS		1/13/00



NOTES: UNLESS OTHERWISE SPECIFIED.

1. MATERIAL: CRS 1008, .010±.001 THICK.
2. FINISH: BRIGHT TIN PLATE PER MIL-T 10727A, TYPE 1 ELECTRO DEPOSITED .00010-.00025 INCHES. FINISH SHALL BE UNIFORM AND EXHIBIT NO EVIDENCE OF CORROSION OR OXIDATION WHEN VIEWED WITH THE UNAIDED EYE. EDGE PLATING ON CUT OR SHEARED SURFACES IS NOT REQUIRED.
3. BREAK AND DEBUR ALL SHARP CORNERS AND EDGES .005 MAX PRIOR TO PLATING.
4. OPERATING TEMPERATURE: -20 TO +50°C. STORAGE TEMPERATURE: -40 TO +70°C. HUMIDITY: 95% NON CONDENSING.
5. PACKAGE ITEMS IN ACCORDANCE WITH STI GENERAL PACKAGING SPEC #50-04100-013.

SPECIFICATIONS:

FREQUENCY: 2400-2485 MHz
VSWR: 2:1
GAIN: 0dbi NOMINAL
CABLE: RG178
CONNECTOR: 50-22100-029

ITEM	QTY.	PART NO.		DESCRIPTION		REMARKS/REF. SYMBOL						
THE DWG. & SPECIFICATION CONTAINED HEREON ARE PROPRIETARY AND MUST NOT BE USED, COPIED, REPRODUCED NOR ITS CONTENTS COMMUNICATED TO OTHERS EXCEPT IN ACCORDANCE WITH WRITTEN INSTRUCTIONS RECEIVED FROM SYMBOL TECHNOLOGIES INC.		DIMENSIONS ARE IN INCHES		APPROVALS		DATE		SYMBOL TECHNOLOGIES INC. Bohemia, New York				
		UNLESS OTHERWISE SPECIFIED		DRAWN J.SIMMONS		1/13/00						
			MM	INCH	CHECKED M.SAVONA		1/13/00		ANTENNA: TYPE F,S24, COBALT, MMCX			
		.XX	+/-	+/- .01	ENG. B.ROSENGRANT		1/13/00					
		.XXX	+/-	+/- .005	MFG. ENG.							
		ANGLES ± 1°		FRACTIONS ± 1/64		PRODUCT		SIZE		DWG. NO.	10-35305-02	REV. A
		MATERIAL: SEE NOTE 1		QUALITY				C				
FINISH: SEE NOTE 2						SCALE: 2:1		SOLID MODEL	YES NO	SHEET 1 OF 1		
								X				

	PDT6140
NEXT ASSY	USED ON
DO NOT SCALE DRAWING	

4

3

2

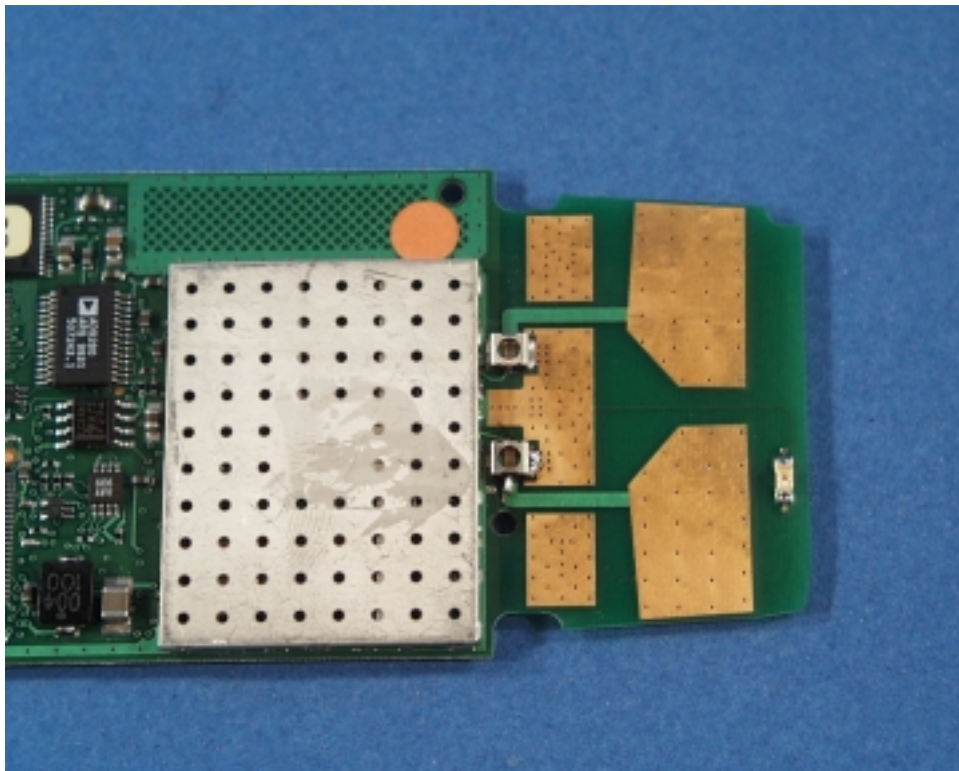
1

IEC PC Antenna

The **IEC PC** antenna is 0 dBi omnidirectional in azimuth plane. It is printed on a extended version of the PCB as shown in the attached photo. There are two patches for spatial diversity. The **IEC PC** does not use a connector. In its use it could be within 20 cm of a persons hand but more than 20 cm from the users body. It is used in portable devices. The following RF exposure information is included in a prominent place in the device's user manual to inform the user of safety issues as required by OET Bulletin 65, Supplement C for EIRP greater than 200 mW.

<i>Location</i>	Laptop PC
<i>Pattern</i>	Omni
<i>Type</i>	Patch
<i>Gain</i>	0 dBi
<i>Physical</i>	See attached dwg
<i>Cable</i>	none
<i>Symbol P/N</i>	24- 20776- 02
<i>EIRP</i>	See Summary Tbl

"CAUTION: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this antenna shall be installed in such a manner that it may be located near hands but must be more than 20 cm from any persons body during normal operating conditions."



Antenna Internal Photo



Antenna External Photo



Antenna Use Photo

Micropaq Antenna

The **Micropaq** antenna is 2 dBi omni-directional in azimuth plane. It is mounted internally as shown in the attached photo. The **Micropaq** uses a MMCX connector. In its use it could be as close as 2.2 cm of a persons body.

<i>Location</i>	Body worn device
<i>Pattern</i>	Omni
<i>Type</i>	PCB
<i>Max Gain</i>	2 dBi
<i>Physical</i>	See attached dwg
<i>Cable</i>	Flex strip
<i>Symbol P/N</i>	50-21900-037



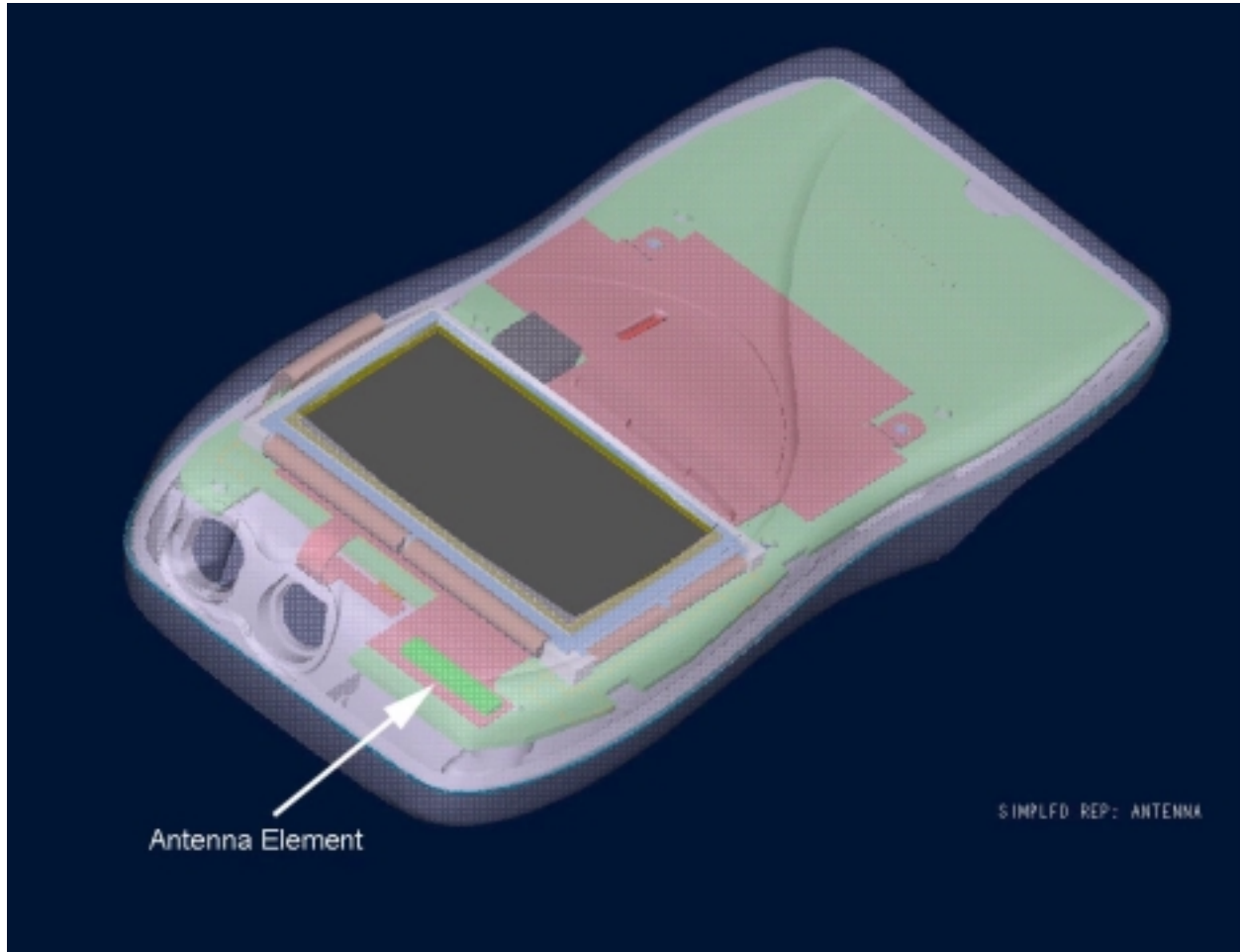
Antenna Photo



Terminal Use

The following text will be located in a conspicuous place in the section describing proper positioning and operation of the body worn device.

"Warning: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this device shall be used in accordance with the operating conditions and instructions listed in this manual."



Antenna Position



Technical Specification Sheet

2.4 GHz Bluetooth Antenna — P/N 100902



Features

- Small and lightweight
- No tuning components
- Available in tube and reel packing for automatic mounting

Ultima™ Series Antennas

This small embedded antenna provides the most reliable, easy to use, and adjustment-free antenna technology for handling during assembly and implementation by developers.

Electrical

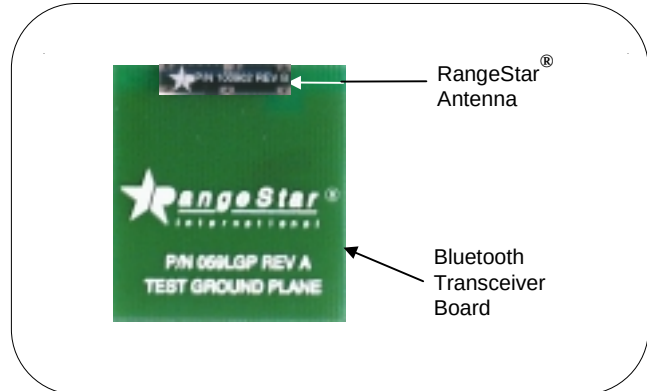
Frequency Range	2.40 – 2.50 GHz
Peak Gain ⁽¹⁾	0 dBi peak
VSWR ⁽¹⁾	Less than 2.0:1
Front-to-Back Ratio	n/a
Polarization	Linear
Azimuth beamwidth	Omnidirectional
Power handling	10 Watt cw
Feed point impedance	50 Ohms unbalanced

Note (1) Figures dependant on ground plane size

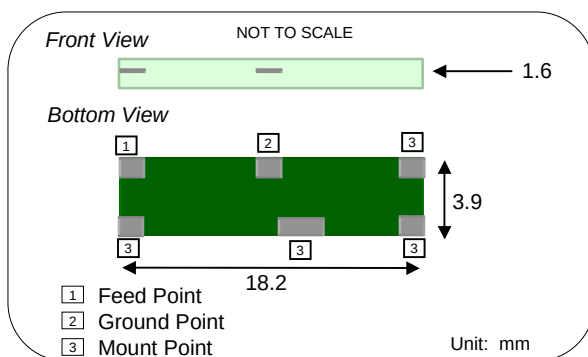
Mechanical

Size	18.2 x 3.9 x 1.6 mm
Weight	Less than 1 g
Mounting	Surface mounted technology

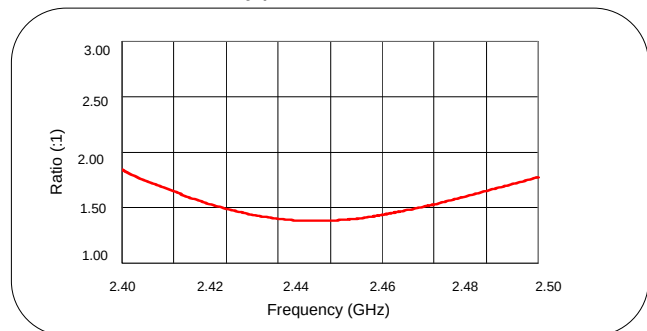
Typical Mounting



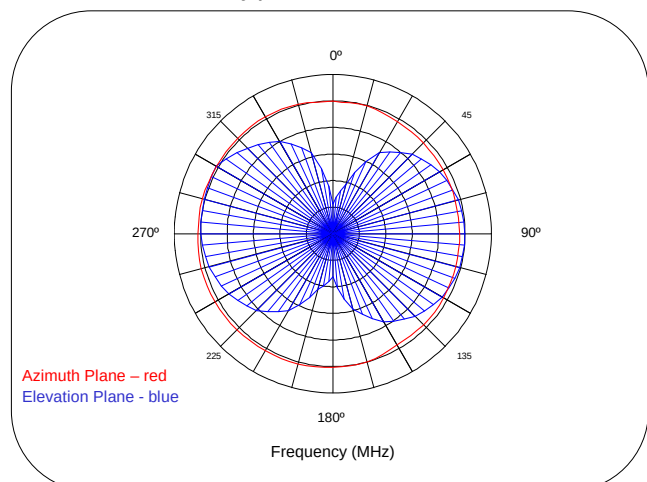
100902 Dimensions



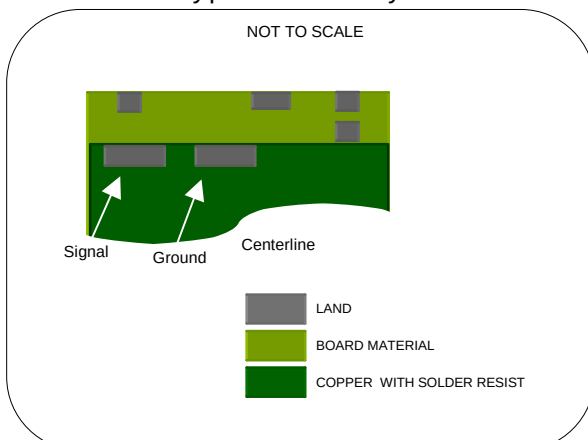
Typical VSWR



Typical Pattern



Typical Pad Layout





RF Exposure Antenna Summary

Network Systems Organization

FCC ID: **H9PLA3021-100**

WLAN PC Card, 2 Mbps, Proj. C, Lo Pwr

Source Based

Mobile DC Factor: 0.650

Output Power: 112 mW

Class II Permissive Change

Portable DC Factor: 0.640

Mobile Antennas (R>20cm)

Ant No	Model	Symbol P/N	Type	Gain (dBi)	Cabel Loss (dB)	Pout (dBm)	MPE (cm)	TR Status	Device Type
01.	XP	50-21900-024	Slot	0.0	0.58	19.92	1.8	Tested	Hand Held Ocp
02.	2742	703624-2	F-Element	0.0	0.13	20.36	1.9	Tested	Hand Held Ocp
04.	7242	10-35477-01	F-Element	0.0	0.12	20.37	1.9	Tested	Hand Held Ocp
05.	Toko	50-21900-022	Puck	0.0	0.00	20.49	1.9	Tested	Hand Held Ocp
07.	6846	10-32290-02	F-Element	0.0	0.34	20.15	1.9	See # 2	Hand Held Ocp
08.	1742	703549-2	F-Element	0.0	0.11	20.38	1.9	See # 2	Hand Held Ocp
09.	7546	10-38649-02	F-Element	0.0	0.31	20.18	1.9	See # 2	Hand Held Ocp
10.	Rubber DuckTNC-RP	50-21900-029	Dipole	1.0	0.00	20.49	2.2	See # 3	Vehicle Mount
11.	6146	10-35305-02	F-Element	0.0	0.12	20.37	1.9	Tested	Hand Held Ocp
12.	IEC PC-LP	LA-3021-100	Patch	2.0	0.00	20.49	2.4	Tested	Laptop

Portable Antennas (R < 5cm)

Ant No	Model	Symbol P/N	Type	Gain (dBi)	Cabel Loss (dB)	Pout (dBm)	EIRP (mW)	TR Status	Device Type	Tx Limited
03.	Voccollect MMCX	50-21900-025	Dipole	2.0	0.25	20.24	107.3	Tested + SAR	Belt Worn 5-	
06.	Oniel MMCX	50-21900-031	Slot	0.0	0.37	20.12	65.8	See #1	Belt Worn 5-	
13.	Micropaq	50-21900-037	PCB	2.0	0.15	20.34	109.8	Tested	Belt Worn 5-	

Antenna Gain listed without cable

TR Status refers to whether the antenna was tested. If not refer to the directed antenna test data

Duty Cycle Factors are applied to MPE and EIRP

Tx Limited configurations are for low power versions of the radio. See the specific antenna exhibit for detail

Wednesday, October 11, 2000 08:44 PM

Page 1 of 1



RF Exposure Configuration Summary

Network Systems Organization

FCC ID: **H9PLA3021-100**

WLAN PC Card, 2 Mbps, Proj. C, Lo Pwr

Output Power: 112 mW

Class II Permissive Change

Ant #	Antenna Model	Terminal Mfgr.	Terminal Model	Use
01	XP	Mitsubishi	XPn	Hand Held Ocp
02	2742	Symbol	SPT-2742-100	Hand Held Ocp
03	Vocollect MMCX	Vocollect	Talkman Open	Belt Worn 5-
04	7242	Symbol	PDT-7242	Hand Held Ocp
05	Toko	Percon	Falcon 315	Hand Held Ocp
06	Oniel MMCX	O'Neil Product Development.	MF4TS24-2	Belt Worn 5-
07	6846	Symbol	PDT-6842	Hand Held Ocp
08	1742	UK	SPT-1746	Hand Held Ocp
09	7546	Symbol	PDT-7542	Hand Held Ocp
10	Rubber DuckTNC-RP	Percon	1380	Vehicle Mount
11	6146	Symbol	PDT-6142	Hand Held Ocp
12	IEC PC-LP	Generic	Laptop	Laptop
13	Micronaq	Protocol Systems	Micropaq 40X	Belt Worn 5-

5- R < 5 cm

5+ 5 cm < R < 20 cm

Ocp Occupational