

SPECIFICATION

Part No. : **PC81.07.0100A.db**

Product Name : **TheStripe™** 868Mhz PCB Antenna
100mm IPEX 1.13mm diameter MHF connector
foam attachment for assembly

Features : 34mm*7mm*0.8mm(PCB)
16mm*6mm*7mm(foam)
Compatible with Hirose U.FL

Photo:



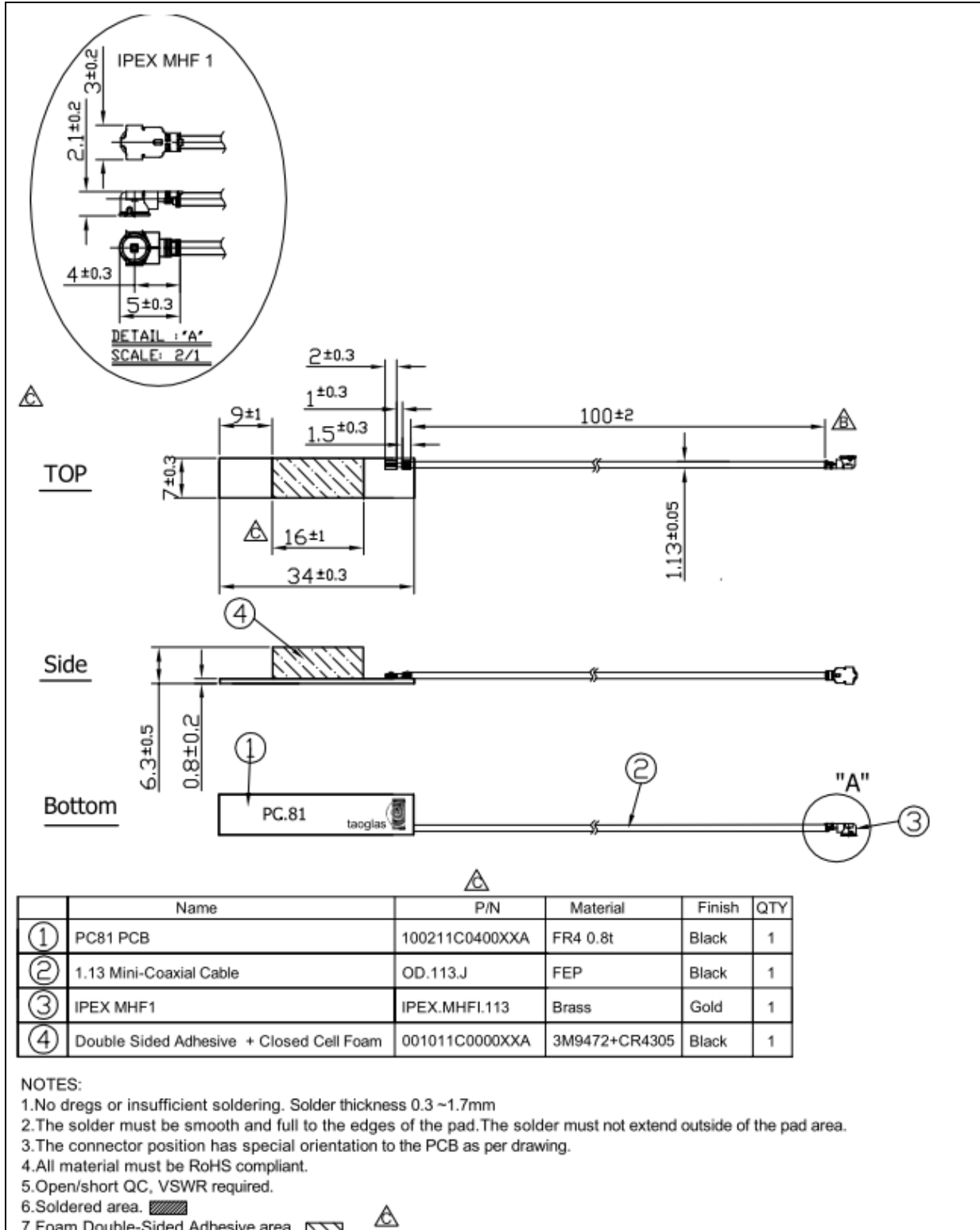
1. Introduction

This miniaturized low profile PCB antenna is based on smart TheStripe™ antenna technology. It consists of a PCB antenna and 1.13mm mini coaxial cable with Ipex MHF (Hirose U.FL comp) connector.

2. Typical Antenna Performance in free space

Parameter	Specification
Applications	868MHz ISM Band
Frequency Band	868-870MHz
Efficiency	50.46%
Return Loss	<-10dB
VSWR	<2.0:1
Impedance	50 Ohm
Polarization	Horizontal
Radiation Pattern	Omni-Directional

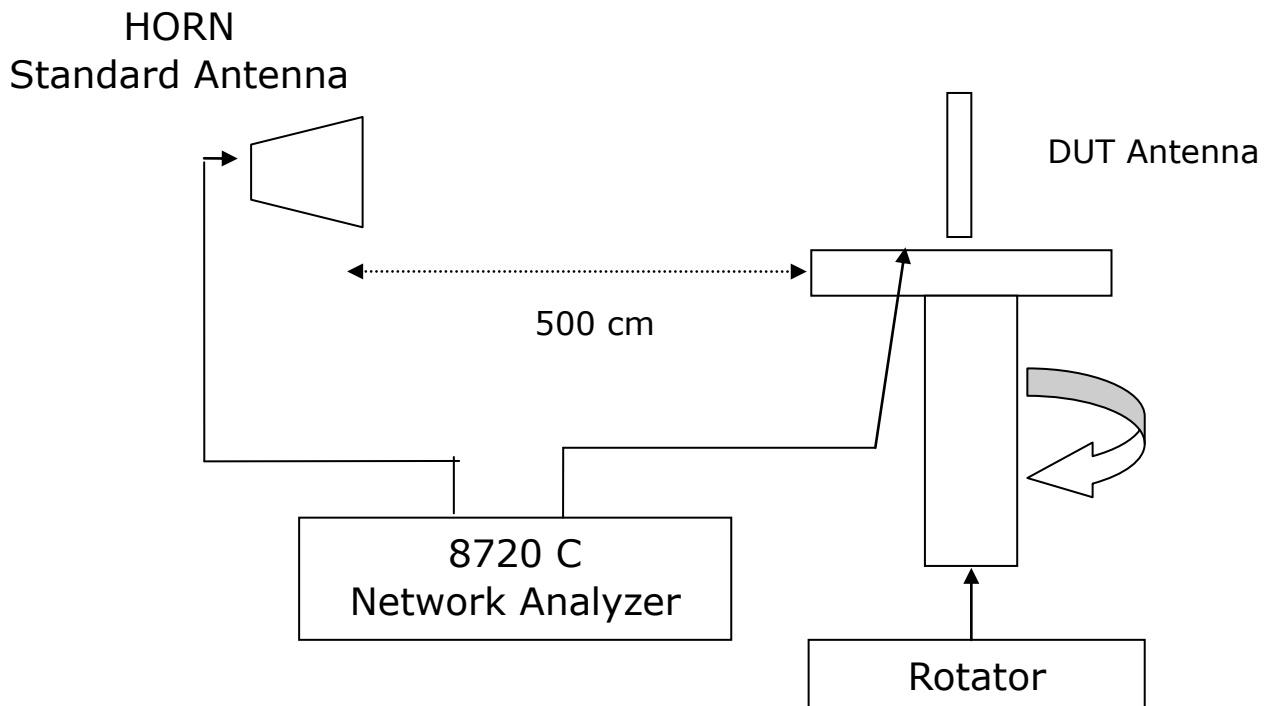
3. Mechanical Dimensions



4. Antenna Test Setup and Results

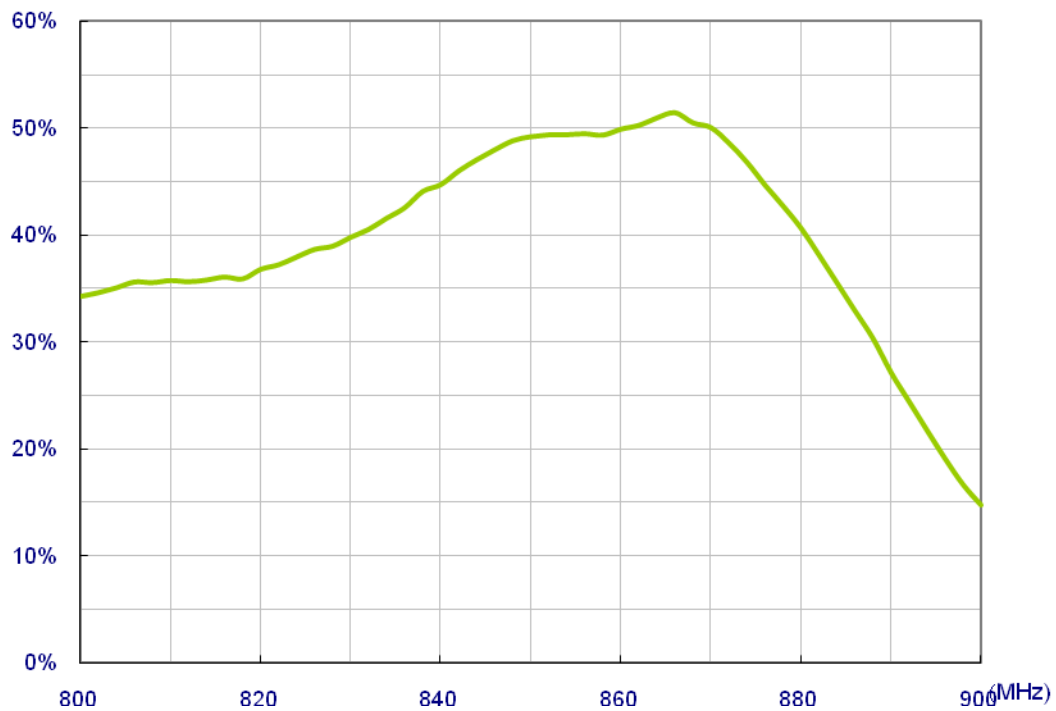
4.1 Equipment

Radiation Pattern Testing - Anechoic



4.2 Efficiency

Efficiency of PC.81 with 100mm coaxial in free space

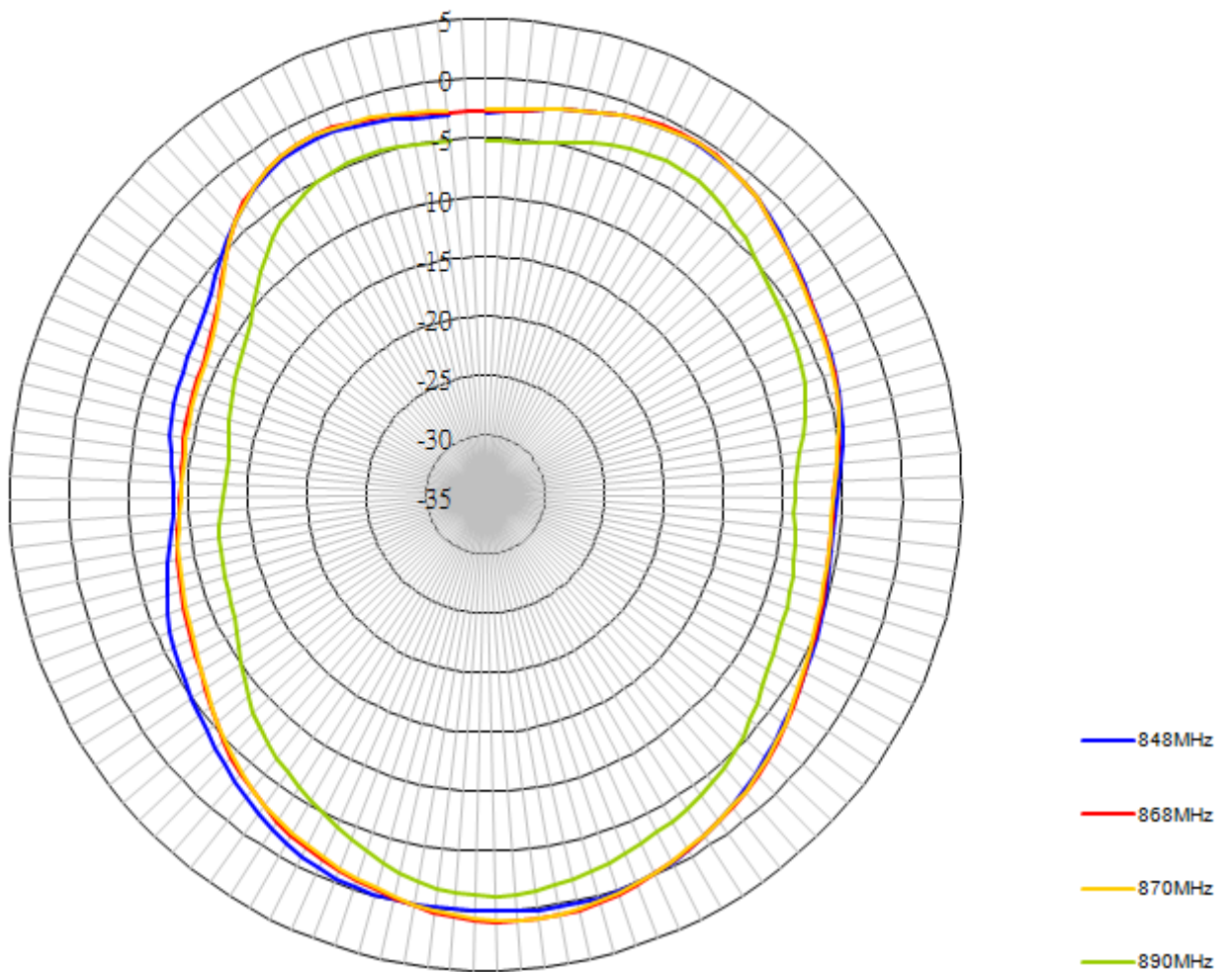


PC.81 Efficiency Data												
Band(MHz)	800	810	820	830	840	850	860	868	870	880	890	900
Gain	0.78	0.93	1.21	1.55	1.88	2.25	2.36	2.51	2.6	1.82	0.01	-2.56
Efficiency (%)	34.26	35.75	36.79	39.78	44.69	49.16	49.86	50.46	50.01	40.63	27.15	14.79
Efficiency dB	-4.65	-4.47	-4.34	-4	-3.5	-3.08	-3.02	-2.97	-3.01	-3.91	-5.66	-8.3

4.3 Radiation Patterns

4.3.1 E-Plane (Horizontal/Azimuth Plane)

PC.81 E-plane Radiation



4.3.2 H-Plane (Vertical/Elevation Plane)

