TAOGLAS

Datasheet

Watson Series

Part No:
MA2332.A.001

Description

Covert Triband Transparent Film Antenna covering 150-900MHz)

Supplied with 330mm RG-316 and SMA(M) Connector

Features:

Low-Profile, Covert Film Antenna
Tri-Band Support: VHF / UHF R1 / UHF R2 / 7-800MHz
Durable ABS+PC Enclosure
Designed for Heavy-Duty Vehicles and Equipment
Integrated 3M VHB Adhesive Mounting
330mm / 13" Low-Loss RG-316 Coaxial Cable
SMA(M) Connector (Custom Options Available)
Compact Dimensions: 562 × 70 × 16.7mm
Suitable for OEM Automotive, Trucks, RVs, Motorcycles, and Machinery
Manufactured in TS16949 Automotive-Approved Facilities
RoHS & REACH Compliant

1. Introduction

The Taoglas Watson Series MA2332 is a next-generation, high-performance, low-profile triband film antenna, designed for demanding automotive and heavy equipment applications. Housed in a robust ABS+PC enclosure with an internal PCB, the MA2332 delivers reliable performance across the VHF, UHF R1/R2, and 7-800MHz frequency bands. Its compact, covert design ensures seamless integration into modern vehicles without compromising durability or RF performance.

Certified to the stringent TS16949 automotive quality standard, the MA2332 is approved for OEM deployment and meets the rigorous requirements of heavy-duty truck and equipment manufacturers.

This makes it the ideal solution for:

- OEM automotive platforms
- Heavy-duty trucks and plant machinery
- Recreational vehicles (RVs)
- Motorcycles
- Specialized and industrial equipment

The antenna includes a 330mm (13") low-loss RG-316 coaxial cable terminating in a SMA male connector as standard. Custom cable lengths and connector configurations are available upon request but a cable assembly with SMA(F) to QMA(M) is advised for use. For tailored integration options, please contact your local Taoglas support team.

2. Specification

VHF	
Band	153 - 174MHz
Gain (dBi)	2.0
Impedance	50 Ω
Polarization	Linear

UHF	
Band	450 – 512MHz
Efficiency (%)	41.7
Impedance	50 Ω
Polarization	Linear

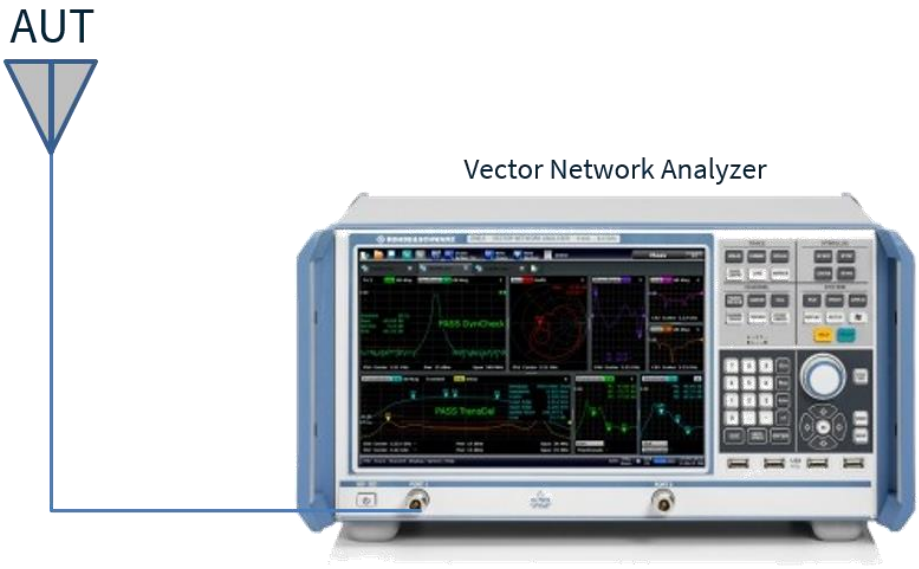
7–800MHz	
Band	7–800MHz
Efficiency (%)	67.5
Impedance	50 Ω
Polarization	Linear

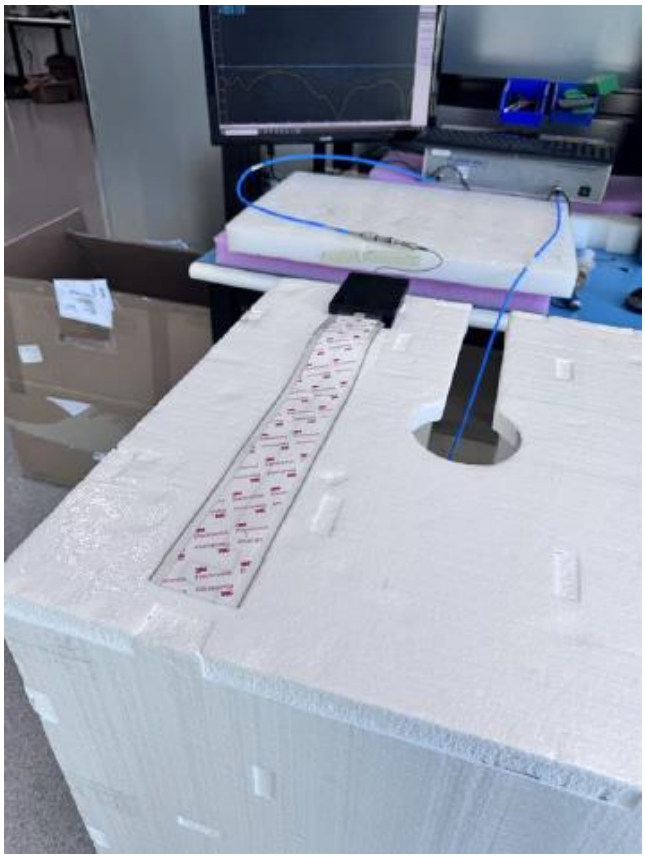
Mechanical	
Dimensions	562.35 × 70.00 × 16.70 mm
Cable	RG-316
Connector	SMA(M)
Housing Material	ABS/PC
Adhesive	3M VHB 5952 on Housing
Weight	130g
Cable Pull Force	15N

Environmental	
Waterproof	IP41 (Internal Installation Only)
Storage Temperature	-40°C to 85°C
Operational Temperature	-40°C to 85°C
Thermal Shock	IEC 60068-2-14
Humidity	Non-condensing 65°C 95% RH

3. Antenna Characteristics

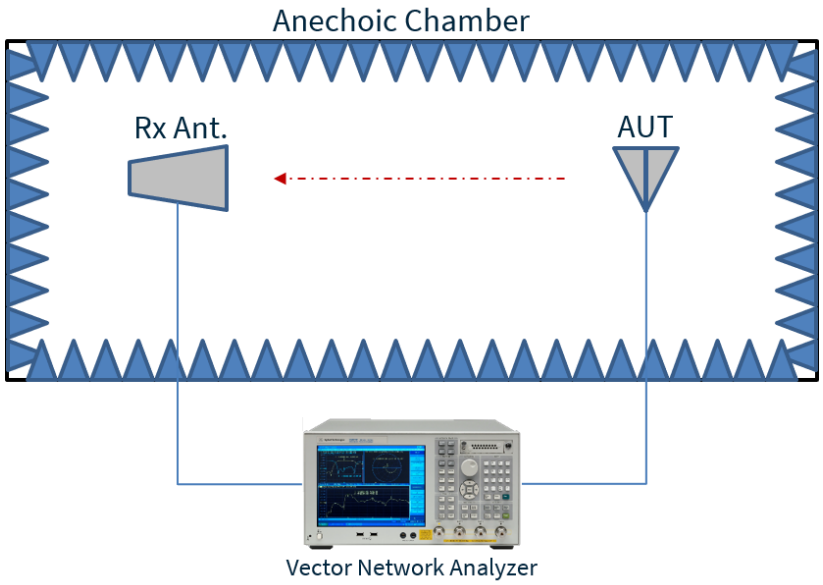
3.1 Test Setup





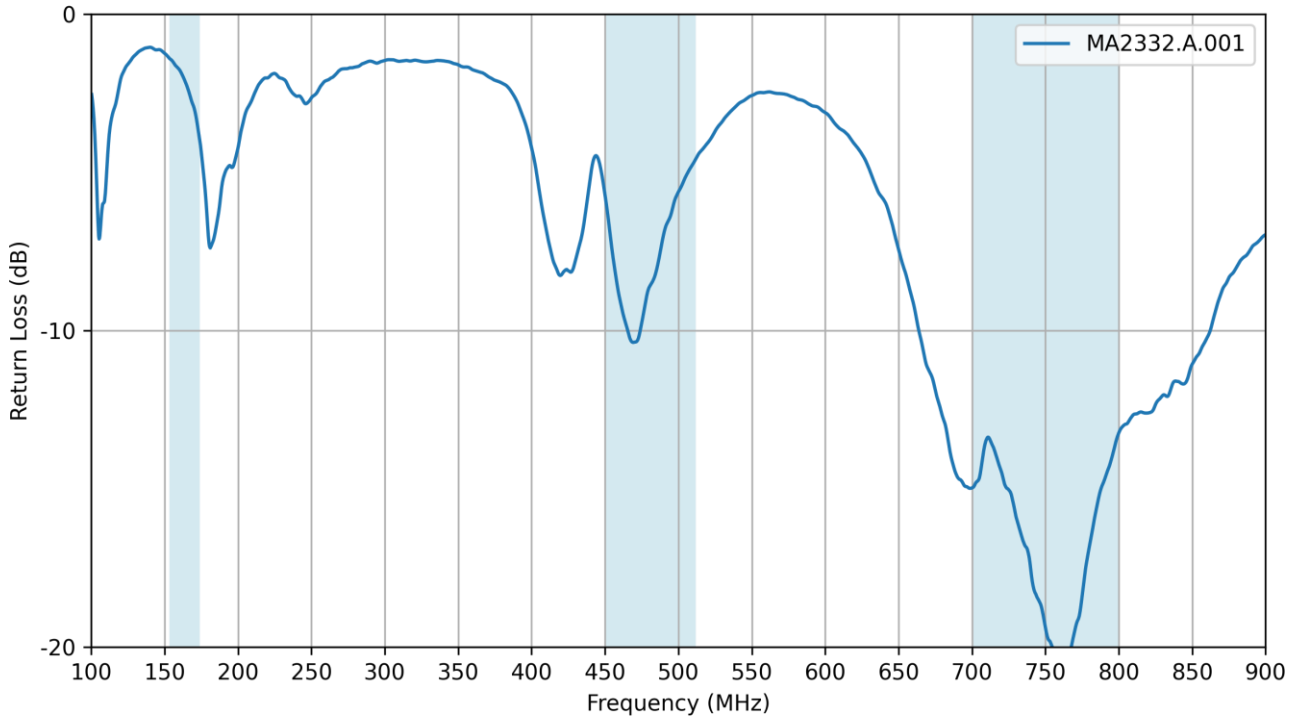
VNA Test Set-up

3.2 Test Setup

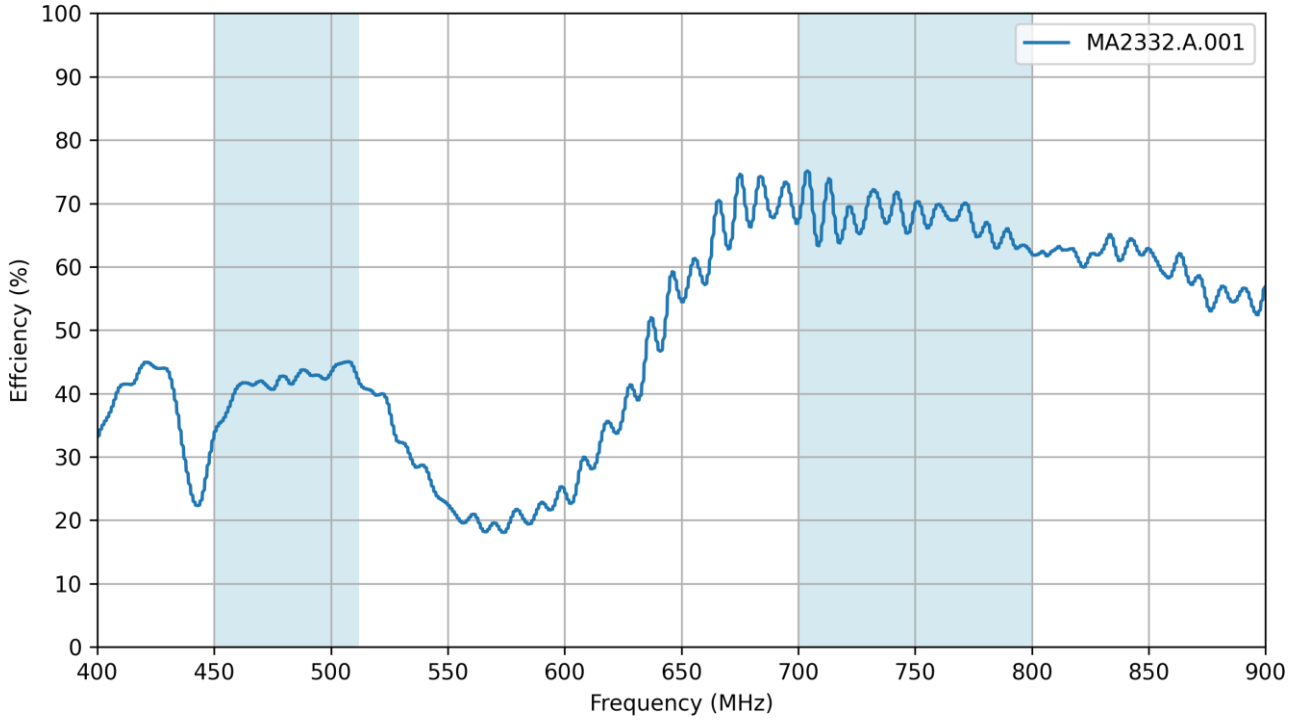


Chamber Test Set-up

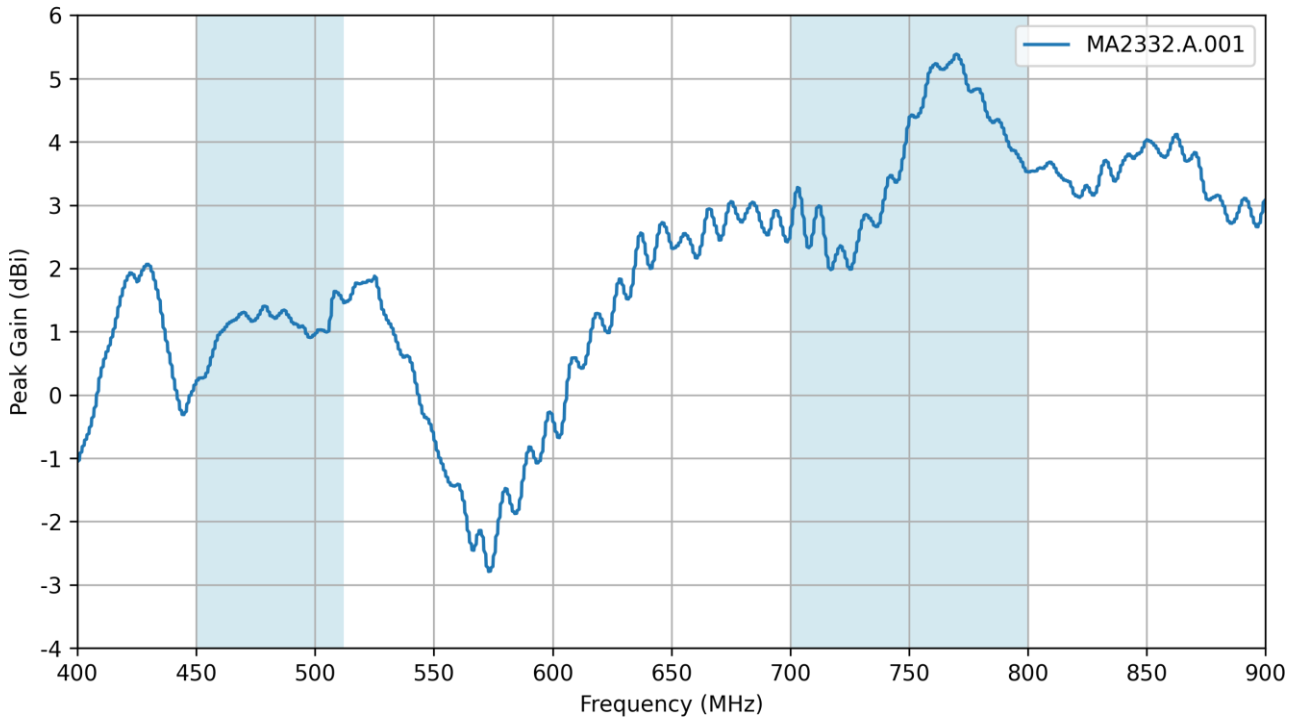
3.3 Return Loss



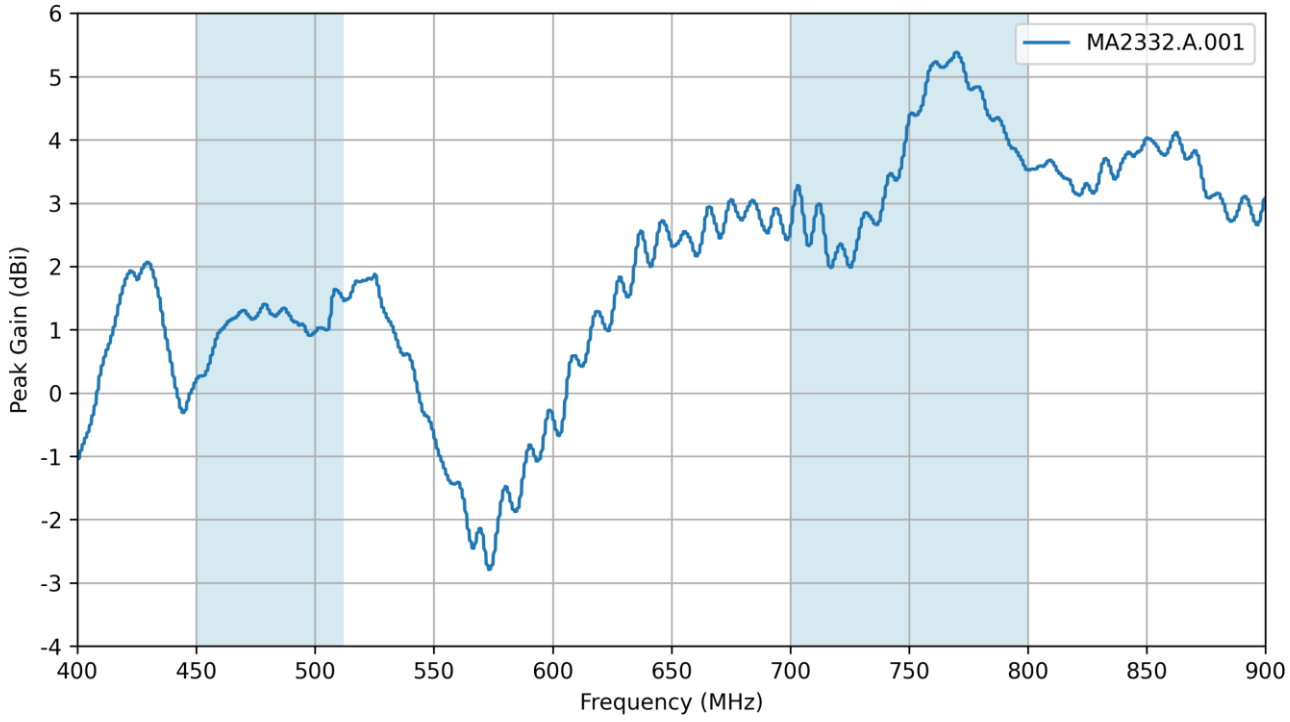
3.4 Efficiency



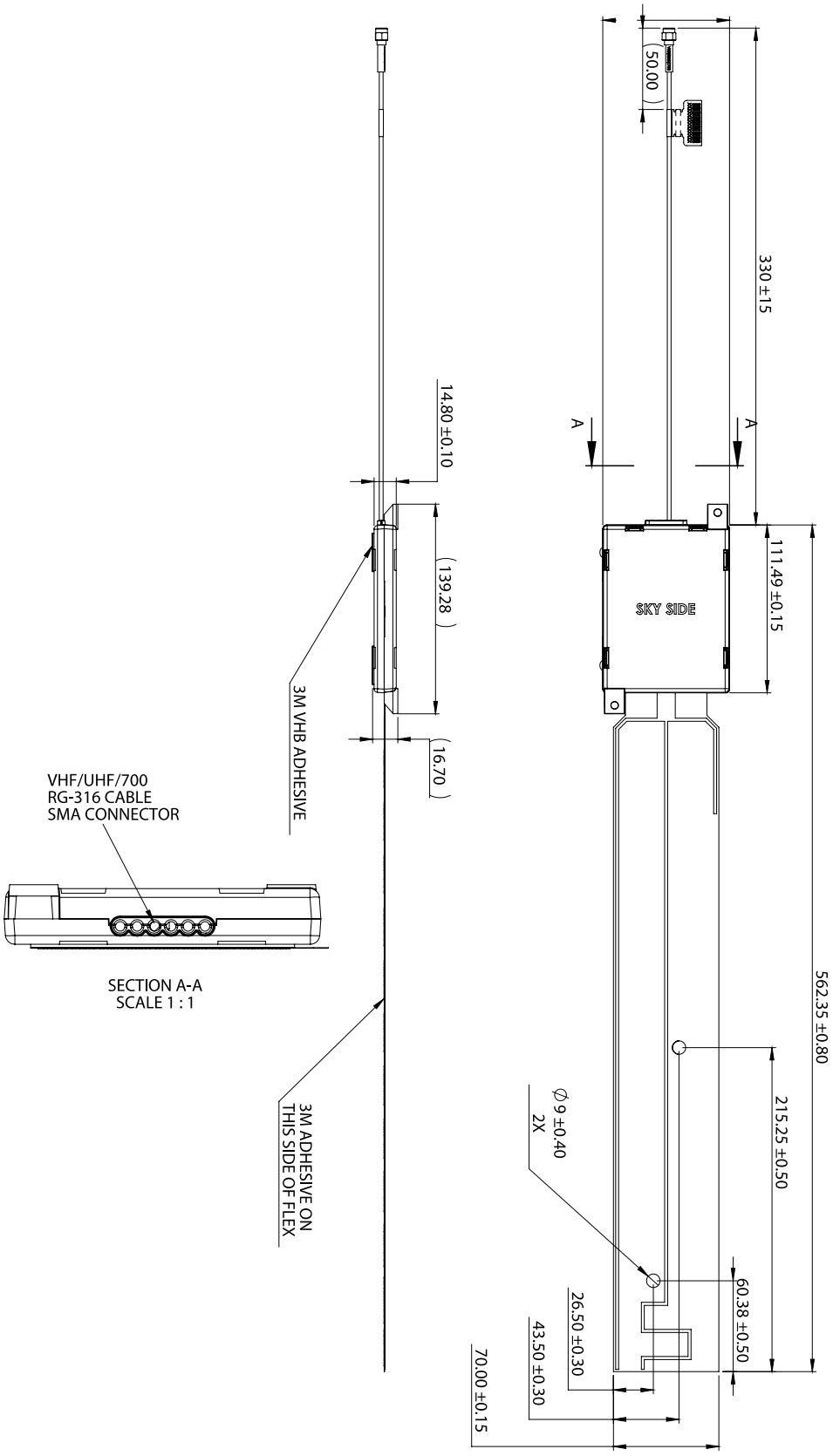
3.5 Average Gain



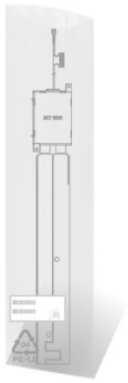
3.6 Peak Gain



4. Mechanical Drawing



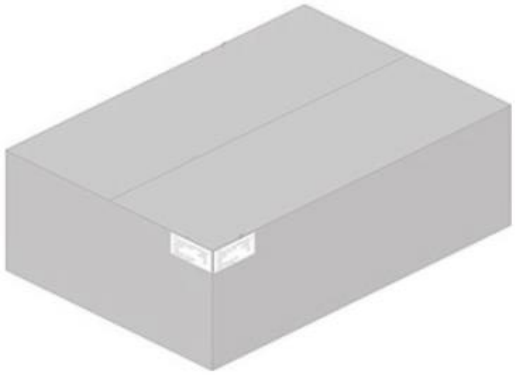
5. Packaging



☑ 1 PCS / PE bag

☑ Weight (Kg): 0.13 ±3%

☑ SPQ Label



☑ 100 PCS / Carton

☑ Carton(mm): 745x518x256

☑ Weight (Kg): 14 ±3%

☑ Carton Label

Changelog for the datasheet

SPE-25-8-140 – MA2332.A.001

Revision: B (Current Version)	
Date:	2025-10-11
Notes:	Updated how frequencies are listed under Tri-Band Support in Product Features on cover page and in Introduction.
Author:	Conor McGrath

Revision: A (Original First Release)	
Date:	2025-05-16
Notes:	Initial Release
Author:	Gary West

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