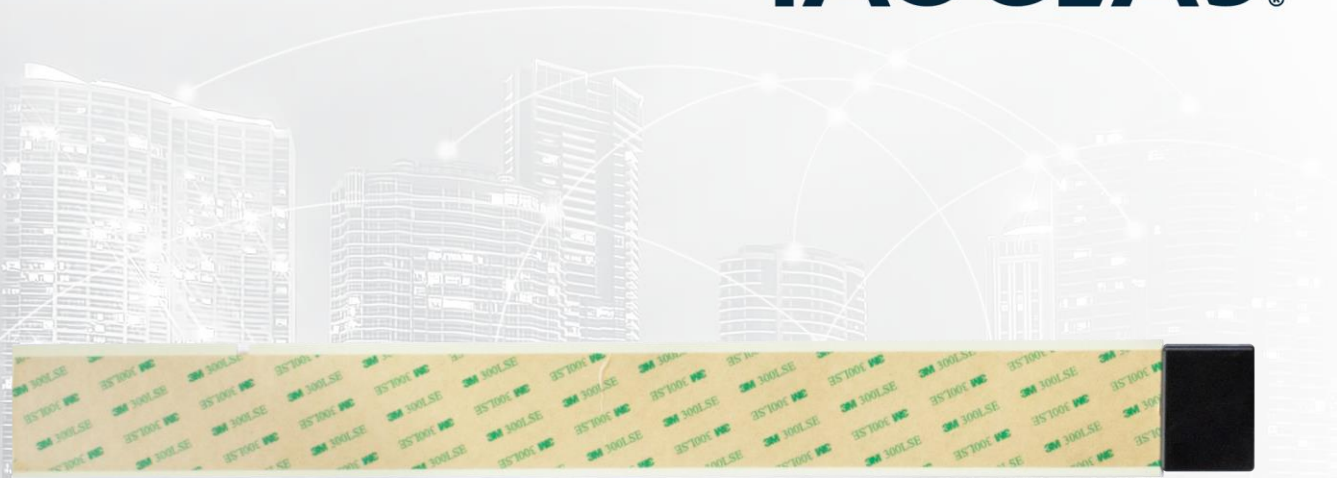




TAOGLAS®



Datasheet

MA2220 2 in 1 AM/FM & DAB Adhesive Antenna

Part No:
MA2220.A.TT.002

Description:

MA2220 - 2in1 AM/FM & DAB Metalized Film Adhesive Antenna

Features:

3M Adhesive

Dimensions: 550 x 60 x 7.2mm

1* DAB Antenna: FAKRA Code A Black

1* AM/FM Antenna: FAKRA Code B White

IP41 Rated Waterproof

Manufactured in TS16949 Automotive Approved Facilities

RoHS & Reach Compliant

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1. Introduction



The MA2220.A thin film antenna is a next generation 2in1, embedded solution for vehicles. It's made with robust ABS+PC housing and metalized PET film. The antenna is approved for use on heavy-duty equipment and meets the strictest OEM heavy-duty truck standards. It supports AM/FM, and DAB band III.

The antenna is first tier TS16949 heavy-duty truck approved and is an ideal choice for Automotive Telematic and heavy-duty plant applications.

The antenna comes with low-loss RG-174 coaxial pigtail cables as standard, terminating in FAKRA SMB code B for AM/FM, and FAKRA SMB code A for DAB III. Both AM/FM and DAB antennas are active. In addition, a long metalized film is utilized to increase receive signal sensitivity. The antenna is manufactured in TS16949 automotive approved facilities.

Contact your local Taoglas customer service team for more information or installation guidelines.

2. Specifications

AM/FM Antenna	
AM Radio Bands	FM Radio Bands
535~1605KHz	88~108MHz

DAB Antenna	
Frequency (MHz)	174-240 MHz

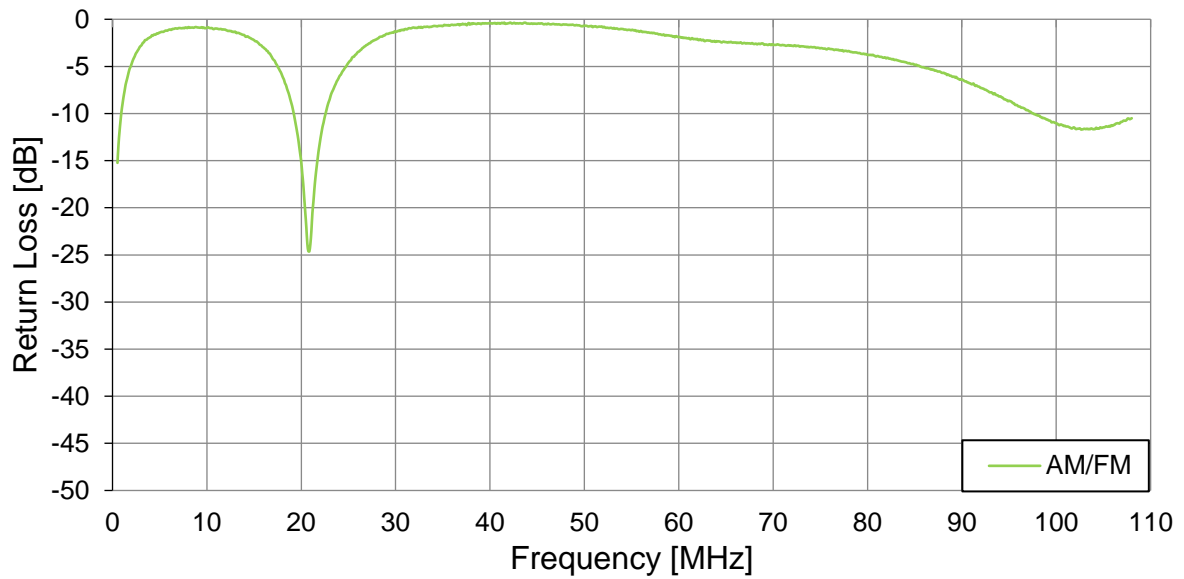
Mechanical	
Dimensions	550*60*7.2 mm
Cable	300mm RG-174
Connector	DAB: FAKRA Code A AM/FM: FAKRA Code B
Housing Material	PC
Film Material	PET
Adhesive	3M9472LE on flex 3M VHB 5952 on Housing
Weight	57.1g
Cable Pull Force	35.59N

Environmental	
Waterproof	IP41
Temperature Range	-40°C to 85°C
Thermal Shock	IEC 60068-2-14
Humidity	Non-condensing 65°C 95% RH

3. Antenna Characteristics

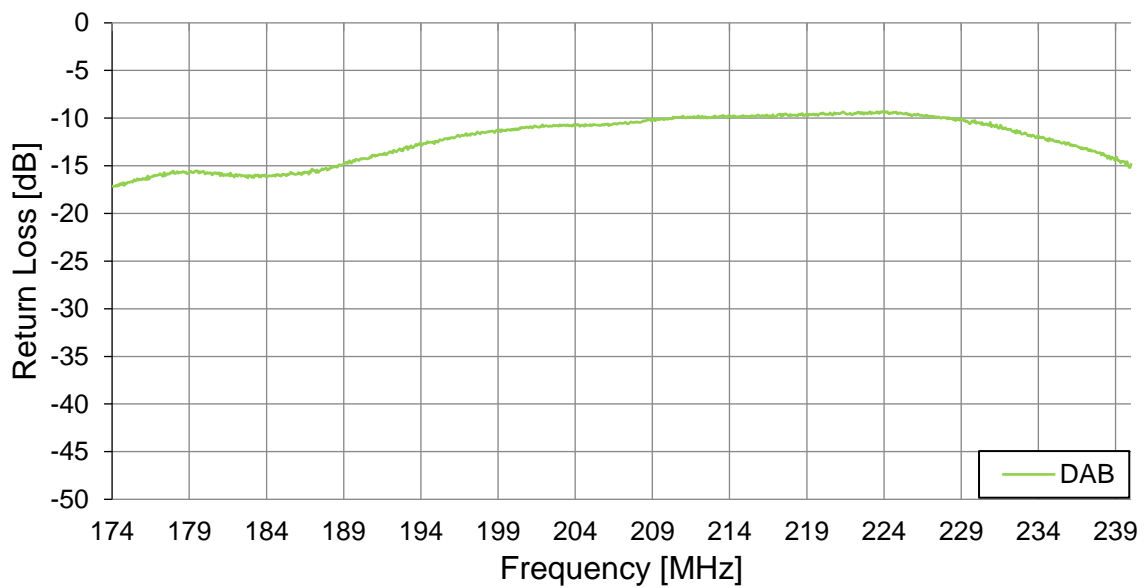
3.1 AM/FM

Return Loss



3.2 DAB Antenna


Return Loss



Amplifier		
LNA-10	Frequency Range	520 KHz–1610 KHz, 88-108 MHz, 174-240 MHz
LNA-20	AM Gain	0.5 dB Typ @ 50 Ohm
LNA-30	FM Gain	13 dB Typ
LNA-40	DAB-III Gain	11 dB Typ
LNA-60	FM/DAB Noise Figure	3.5 dB Typ
LNA-70	AM Noise Figure	N/A
LNA-80	FM/DAB Output 1dB CP	16dBm
LNA-80	AM Output 1dB CP	127dBuV typ
LNA-90	AM Output SWR	N/A
LNA-100	FM/WB Output SWR	3:1 Max
Power		
POW-10	Input Voltage	10 ~ 16V
POW-20	Current	50 mA Typ

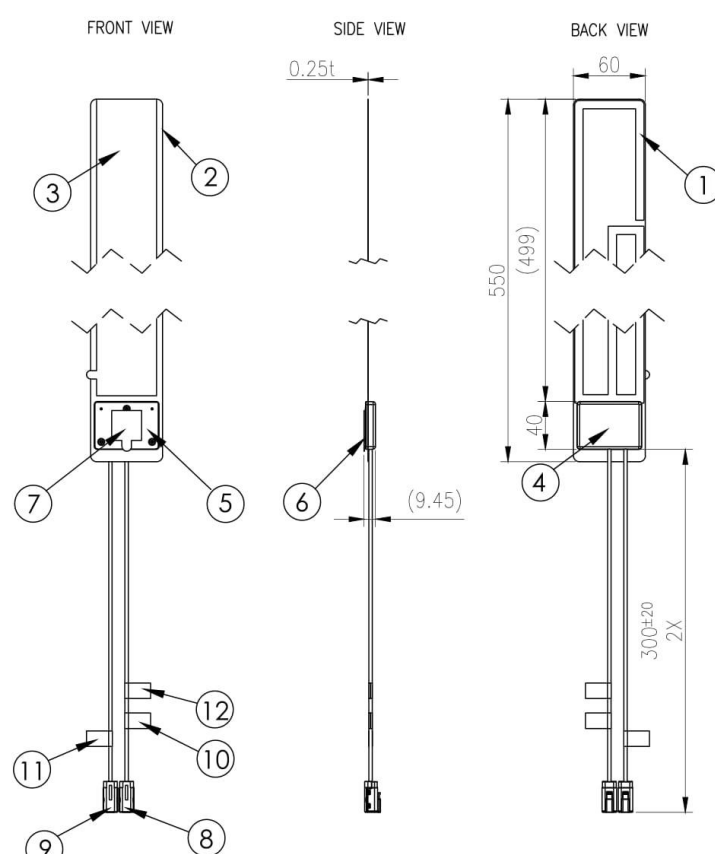
4. Mechanical Drawing (Units: mm)

6	5	4	3	2	1	
ISO NO: EDW-19-8-0920	<Release>	REV ZONE	DESCRIPTION	ENG	APPROVED	ISSUED DATE
		ALL	Initial Design	S.Stanton	Aaron	2019/09/04

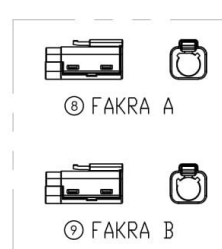


3D VIEW
SCALE: 1/2

FRONT VIEW SIDE VIEW BACK VIEW




#	Name	Material	Finish	QTY
1	Flex Film Antenna	PET	Clear	1
2	Flex Antenna Adhesive	3M 300LSE	Clear	2
3	Adhesive Peel Off	PE Coated Paper	Brown	2
4	Housing	PC	Black	1
5	Housing Base	PC	Black	1
6	Housing Adhesive	Foam	Black	1
7	Adhesive Peel Off	PE Film	Red	1
8	RG-174 Cable Assembly with FAKRA A (DAB)	PVC	Black & Black	1
9	RG-174 Cable Assembly with FAKRA B (AM/FM)	PVC	Black & White	1
10	DAB Label	Coated Paper	White	1
11	AM/FM Label	Coated Paper	White	1
12	Module Label	Coated Paper	White	1



Ⓢ FAKRA A

Ⓢ FAKRA B

SCALE: 2.5/1

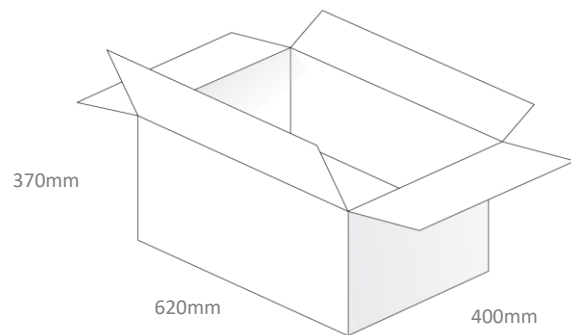
UNLESS OTHERWISE SPECIFIED TOLERANCES ON:		DATE: 2019/09/04	MAT'L:	 <p>TAOGLAS. TW Design Centre This drawing and its inherent design concepts are property of Taoglas. Not to be copied or given to third parties without the written consent of Taoglas.</p>	REV
.X ± 0.2	XX ± 0.1	UNIT: mm	FINISH:		D01
XX ± 0.5	.XX ± 0.1	THIRD ANGLE PROJECTION	SCALE: 1/1	TITLE: :2in1 Adhesive Mount 300mm RG-174 AM/FM FAKRA Code B DAB FAKRA Code A	
X ± 0.3	.XXX ± 0.05	APPROVED BY: Aaron	CUSTOMERS SIGNATURE / DATE	PART NO. : MA2220.A.TT.002	
		CHECKED BY: Aaron			
		DRAWN BY: S.Stanton			

5. Packaging

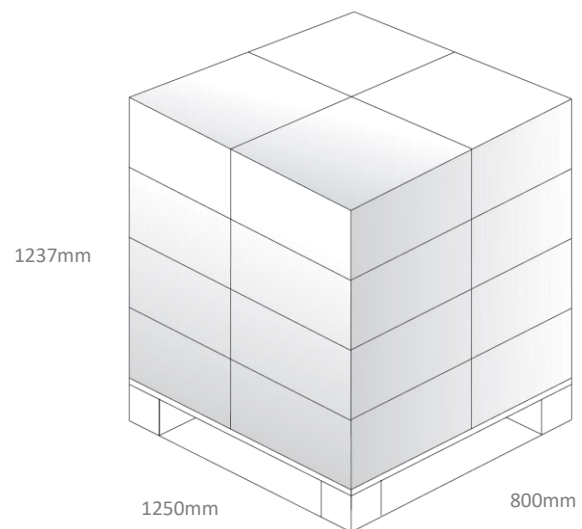
1pc MA2220.A.TT.001 per Poly Bag
Weight: 57.1g



200pcs MA2220.A.TT.001 per Carton
Dimensions: 620*400*370mm
Weight: 11Kg



Pallet Dimensions:
1250*800*1237mm
12 Cartons Per Pallet
4 Cartons Per Layer, 3 Layers



Changelog for the datasheet

SPE-19-8-114 – MA2220.A.TT.002

Revision: A (Original First Release)

Date:	2019-08-26
Notes:	Initial Datasheet Release
Author:	Yu Kai Yeung

Previous Revisions



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