ANTENNA OF THINGS

CABLE ASSEMBLY DATASHEET

PN: CA-RPSMAK174L-TSA-W01

Revision History **(Required)**

Revision	Date	Note
Rev. 1.0	August/06/2023	Initial Draft
Rev. 2.0	August/15/2024	Updated the package instruction

Disclaimers

The information in this document is provided in connection with AOT Antenna products and is proprietary and confidential. AOT may make changes at any time, without notice.
Please verify with AOT before finalizing a product design

1. CA-RPSMAK174L-TSA-W01 Features

AOT's CA-RPSMAK174L-TSA-W01 is pre-configured RF test cable designed for high-performance applications requiring minimal insertion and return loss. Each assembly is tested to ensure electrical and mechanical performance.
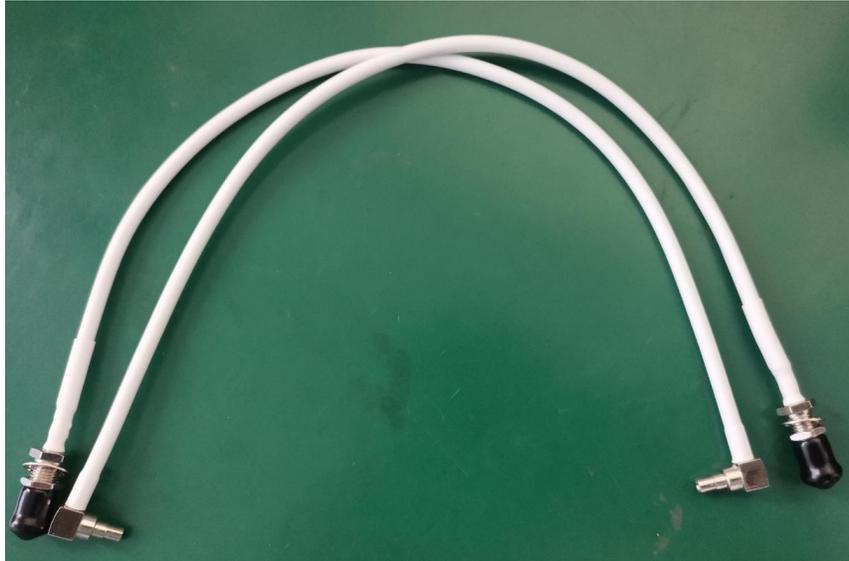
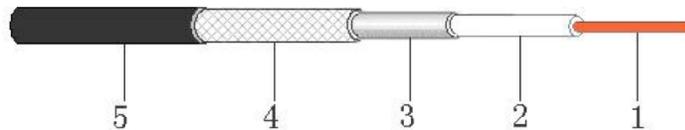**Figure 1:** Model of CA-RPSMAK174L-TSA-W01 Cable Assembly

Features and Applications
- DC to 6GHz
- High phase stability
- low loss
- ROHS compliant

2. Specifications and Interface

Connector Type	TS9-JW to RP-SMA-K
Cable Type	RG174 Low loss, Black
Frequency Range	0-6GHz
VSWR	<1.3dB
Withstanding Voltage	500 V
Isulation Resistance	1000 M Ω
Feed Impedance	50Ω
Connector Material	Body, Ni plated
	Male Contact, Gold plated
	Insulator, PTFE
Temperature Range	Operating temperature: -40° C to +105° C
	Storage temperature: -40° C to +85° C

一、产品结构图 **Structure diagram of product**

二、产品规格尺寸 **Size of product**

序号 No.	项目 Item	结构 Structure	材质 Material	颜色 Color
1	内导体 Inner conductor	7/0.16±0.01mm	裸铜丝 Bare copper	黄色 Yellow
2	绝缘层 Insulation	1.52±0.10mm	聚丙烯 PP	白色 White
3	纵包 Folia	1.60±0.10mm	铝箔 Aluminum foil	银灰色 Silver gray
4	编织 Wire braid	64*0.10 mm	镀锡铜丝 Tinned copper	银白色 silvery white
5	外护层 Jacket	2.80±0.10mm	耐寒聚氯乙烯 PVC	黑色 Black

3. Assembly Drawing

Note:
1. An [X] dim identifies a key characteristic, a (X)dimension is for information purposes only and no tolerance is implied.
2. All materials shall be ROHS compliant.
3. Electrical Specification:
   Frequency Range: 0~6GHz   Impedance: 50Ω   Insertion Loss<1.3dB
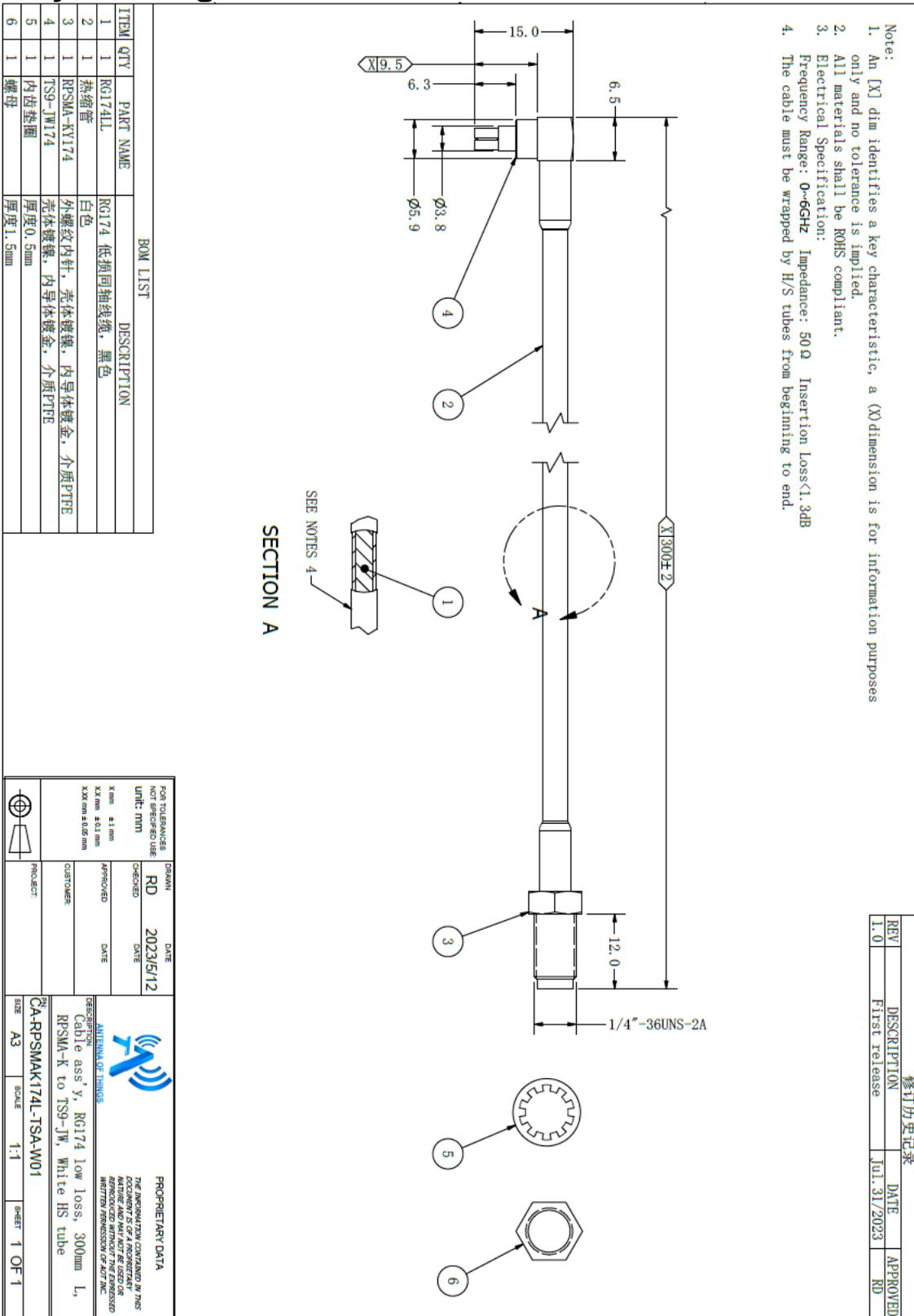4. The cable must be wrapped by H/S tubes from beginning to end.

Figure 2: Model CA-RPSMAK174L-TSA-W01 Assembly Drawing

REV	DESCRIPTION	DATE	APPROVED
1.0	First release	Jul.31/2023	RD

修订历史记录

ITEM	QTY	PART NAME	DESCRIPTION
1	1	RG174LL	RG174 低损同轴线缆，黑色
2	1	热缩管	白色
3	1	RPSMA-KY174	外螺纹内针，壳体镀镍，内导体镀金，介质PTFE
4	1	TS9-JW174	壳体镀镍，内导体镀金，介质PTFE
5	1	内齿垫圈	厚度0.5mm
6	1	螺母	厚度1.5mm

BOM LIST

SECTION A

SEE NOTES 4

unit: mm

FOR TOLERANCES NOT SPECIFED USE
X mm   ±1 mm
X.x mm   ±0.1 mm
X.xx mm ±0.05 mm

DRAWN	RD	DATE	2023/5/12
CHECKED		DATE	
APPROVED		DATE	
CUSTOMER			
PROJECT:			

DESCRIPTION: Cable ass'y, RG174 low loss, 300mm L, RPSMA-K to TS9-JW, White HS tube

PN: CA-RPSMAK174L-TSA-W01

SIZE	A3	SCALE	1:1	SHEET	1 OF 1

ANTENNA OF THINGS

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