

# Xundian (Shenzhen) Communication Technology Co., Ltd

Building A Gushu Wanlihua Industrial Park, Xixiang, Bao'an District.

Shenzhen

Tel No.: 0755- 2399 2476 Fax No.: 0755- 2399 2476

# **Specification for Approval**

Customer	
Product Name	RF 1.32 Coaxial Cable Spec.
Spec. No	SPH-3-RF1.32
Your P/N	
Our P/N	MC-RF1.32
Issue Date	Oct. 11, 2020

<sup>\*</sup> stands for the jacket color identification.

# **Customer Approval:**

Prepared by	Checked by	Approved by

**Document preparation: Shin Din Cable, Ltd.** 

Prepared by	Checked by	Approved by		
Isabella	Michael	Michael		

Xundian Page 1 of 6

# **Document List:**

Content	Page No.
Part 1: Technical information	3
Part 2: Element Table for Material and MSDS	4~5
Part 3: Electronic performance data	6
Part 4: Environmental report	Attached separately

Xundian Page 2 of 6

# Part 1: Technical information

# 1. Scope:

This specification covers FEP insulated High-Frequency coaxial cable for internal wiring of electronic equipment.

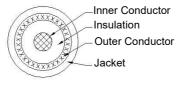
USE: Internal wiring of Class 2 Circuits of Electronic Equipment.

# 2. Construction:

Item		Unit	Spec. Value	
Inner Conductor Insulation Braiding 1	Material		Silver plated copper	
	Construction	No./mm	7/0.08	
	Dia.(approx)	mm	Silver plated copper   mm   7/0.08   m   0.24	
	Material	Silver plated copper	FEP	
Inner Conductor  Dia.(appro Material Nom. Thicke Dia.(appro Color Type Material Braiding 1 Construct Coverage Dia.(appro Type Material Braiding 2 Construct Coverage Dia.(appro Material Braiding 2 Construct Coverage Material And Construct Coverage Dia.(appro Material Coverage Material Dia.(appro Material Material	Nom. Thickness	mm	0.22	
Ilisulation	Dia.(approx)	mm	0.68±0.05	
nner Conductor  Construction  Insulation  Insulation  Braiding 1  Braiding 2  Braiding 2  Braiding 2  Coverage Materia  Nom. Thick	Color		Natural	
	Type  Material  Construction No./ No  Coverage %  Dia.(approx) mm		Braiding	
Braiding 1	Material		Tinned copper	
	Construction	No./ No./mm	16/4/0.05	
			>90	
	Dia.(approx)	mm	0.93	
	Туре			
	Material		Silver plated copper 7/0.08 0.24 FEP 0.22 0.68±0.05 Natural Braiding Tinned copper 16/4/0.05 >90 0.93 Braiding Tinned copper 16/5/0.05 >90 1.16 FEP 0.08 Upon request	
Braiding 2	Construction	Silver plated copper		
Nom. Thickness   mm	>90			
	Dia.(approx)	mm	1.16	
			FEP	
Jacket	Nom. Thickness	mm	0.08	
	Color		Upon request	
	Dia.(approx)	mm	1.32±0.10	

# 3. Characteristics:

Test Item	Unit	Specified Value	Note	
Appearance	-	Faultless in visible	-	
Inner conductor resistance(at 20 °C)	Ω/km	Max.597	At 20℃	
Insulation resistance 1> (at 20℃)	MΩ-km	Min.1500	At 20°C	
	-	Dielectric core: No breakdown at AC1.5KV for 0.15sec.	Spark test	
Dielectric strength	_ Jacket: No breakdown at AC 1.5KV for 0.15sec.		Spark test	
	-	Between Inner and outer conductor: No breakdown at AC 500V for 1min	Completed cable	
Flame retardant	-	VW-1	UL 1581	
Capacitance (Nom.)	pF/m	98	At 1KHz	
Characteristic impedance (at D-TDR)	Ω	50±3	TDR method	
	dB/m	2.0	1GHz	
		2.9	2GHz	
Attenuation (Max.)		3.7	3GHz	
		4.3	4GHz	
		4.8	5GHz	
		5.3	6GHz	



Cross-section of cable

# 4. Packing:

In paper bobbin.

Xundian Page 3 of 6

# Part 2: Element Table for Material and MSDS

成-分-表

材料名稱: RF1.32 細同軸線 材料單重: \_50804\_(mg)

材料規格: SPH-3-RF1.32 材料單位: (m)

材料構成

1771年1月1							
使用部位	部位質量 (mg)	材料名	材料的構成物質	CAS No.	。 へ 去 具 (mg)	含有率	備考
導體	350	鍍銀銅線	Cu	7440-50-8	今有量 344.75	6.786 %	
			Ag	7440-22-4	5.25	0.103%	
絕緣體	742.6	FEP	FEP	26655-00-5	742.6	14.617%	
編織	3138.8	鍍錫銅線	Cu	7440-50-8	3044.636	59.929%	
			Sn	7440-31-5	94.164	1.853%	
外皮	849	FEP		26655-00-5	788	15.511%	
			色母	/	61	1.201%	
<u>合計</u>	<u>5080.400</u> mg	9			########### mg	100.000%	

作成日: <u>2020年10月11日</u> 公司名: <u>Xundian</u> TEL: <u>0755-2399 2476</u> FAX: <u>0755-2399 2476</u> 制作人名: <u>劉紅英</u>

Xundian Page 4 of 6

# Material Safety Data Sheet

Xundian

Date: Oct.11, 2020

1. Product and Company identification: Product name: RF-1.32 coaxial wire Company name: Shin Din Cable, Ltd.

Address: Pak Mong, Xili, Nanshan, Shenzhen city, China

Fax No.: 86-755-2765 3459 Tel No.: 86-755-2765 3333

# 2. Composition/Information on ingredient:

Single substance or mixture: Mixture Inner conductor: Silver plated copper

Insulation: FEP

Outer conductor: Tinned copper wire

Jacket: FEP

#### 3. Hazard identification:

- Do not discharge into the environment;
- When this product is heated for a long time or at higher temperature, it generates particulate matter or hazardous fume gas.

#### 4. First-aid measures:

- Inhalation:

In case of headache and nausea, remove the victim from contamination immediately to fresh air, keep quiet and seek medical advice.

- Skin contact:

No hazards.

- Eyes contact:

No hazards.

- Ingestion:

Rinse mouth. Get medical attention.

# 5. Fire fighting measures:

- General Information:

In case of fire in surrounding area, shut off the source of origin of fire. Wear full protective equipments, fire-fighting clothes, with full-masked air respirator for fire-fighting operation.

- Extinguishing Media:

Use any type of extinguisher, like foam, dry powder, carbon dioxide and dry sand.

### 6. Accidental release measures:

Collect wasted wire and bury it. Do not burn with incinerator.

# 7. Handling and storage:

Handling:

"No smoking" practice should be maintained in a work place and after handling materials, wash face and hands thoroughly. Cigarettes are not carried into a work place so that materials may not adhere tothere.

Storage:

Store in a cool, dry area, away from direct heat or sunlight.

Xundian Page 5 of 6

# Part 3: Electronic performance data

#### 1. Impedance test:

Meter: TDR (Time domain reflector)

DUT (device under test): SMA connector+ 1M length cable

QTY: 1 PC

# Test procedure:

Calibrate meter.

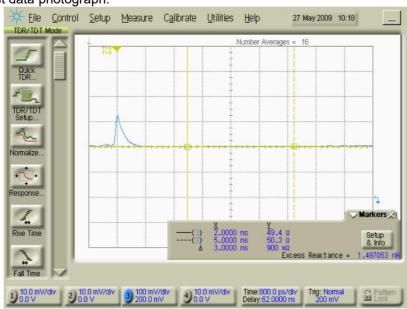
Connect DUT and Meter.

Measure cable, we can find a sine wave on the screen of meter.

Set mark points at 2ns and 5ns of the wave.

Read the mark point and record it!

#### Test data photograph:



#### 2. S11 and S21 parameters test

Meter: NA (Network analyzer); 2 port and up to 8.5GHz DUT: I-Pex connector+ 1 M length cable +I-Pex connector.

QTY: 1PC Test procedure:

Calibrate NA for "full 2 port". At least, need a test cable connect to NA.

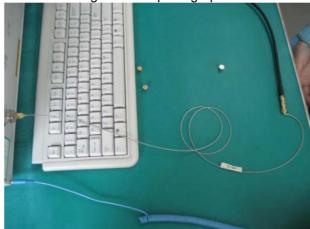
Connect DUT and NA.

Measure cable, and spared screen, one for S11 the other is S21.

Set mark points for 1GHz 2GHz 3GHz 4GHz 5GHz 6GHz 7GHz 8GHz.

Save trace data for S11 and S21.

Test connecting and data photograph:





Xundian Page 6 of 6