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# TECHNICAL SPECIFICATION

## Leaky Coaxial Cable 7/8" for Wireless Communications

Designer

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## 1. GENERAL

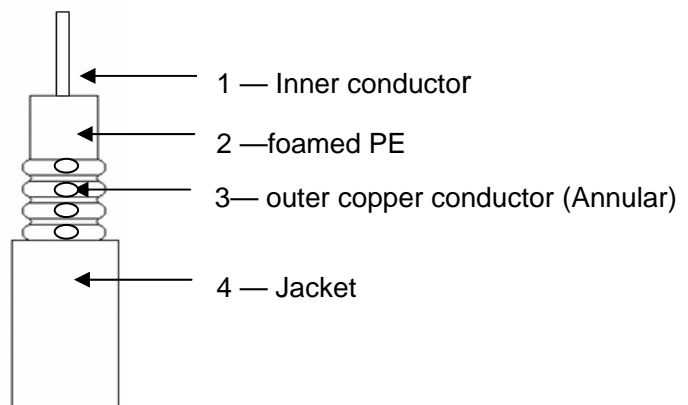
This specification covers the general requirements and performance of radio frequency coaxial cable provided by Zhongtian Technology Co., Ltd. (hereafter called ZTT for short).

## 2. STANDARD

The radio frequency coaxial cable which ZTT offered shall be designed, manufactured and tested according to standards as follows:

- 1、IEC 61196-4:Coaxial communication cables-sectional specification for radiating cables;
- 2、GB/T 17737.1-2000: Radio-frequency cables Part 1: Generic specification--General, definitions, requirements and test methods;
- 3、YD/T 1120-2007: Communication cable—foamed polyethylene dielectric corrugated copper tube outer conductor leaky coaxial cable

## 3. Leak coaxial cable-coupled mode 7/8" feeder (double slot C2)



➤ Inner conductor	Copper tube	9.00mm±0.10
➤ Insulation	Foamed polyethylene	22.30mm±0.20
➤ Outer conductor	Annular corrugated copper tube	24.90mm±0.30
➤ Jacket	<b>LSZH</b>	27.50mm±0.20

### 3.1 MECHANICAL CHARACTERISTICS

➤ Min. static minimum bending radius	250 mm(Single bend)
➤ Tensile strength	1700 N
➤ Weight of cable	500 kg/km
➤ Lay environment temperature	-45℃~+85℃

### 3.2 ELECTRICAL CHARACTERISTICS

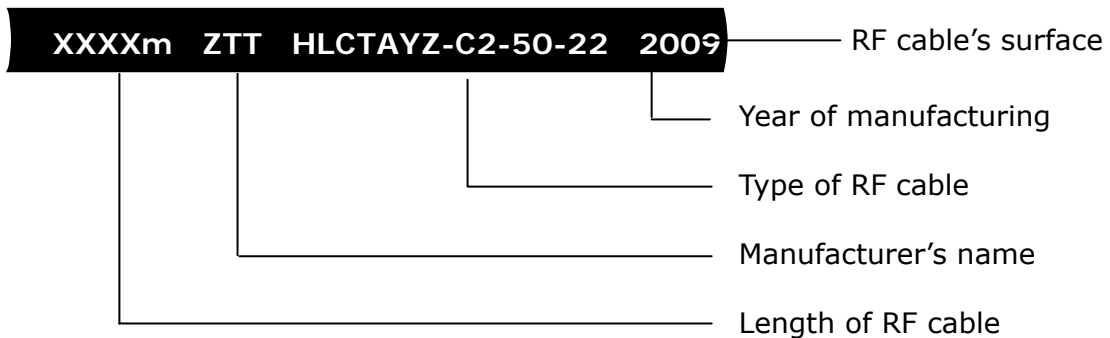
➤ Characteristics impedance	50±1 Ω	
➤ Velocity	88%	Nominal value
➤ Min. insulation resistance	5000 MΩ.km	DC 500V 1 minute
➤ Capacitance	76 pF/m	Nominal value
➤ Dielectric strength	DC 4000 V	1 minute
➤ VSWR typical value	✓ 1.30	✓ 800~1000MHz
	✓ 1.30	✓ 1700~1900MHz
	✓ 1.30	✓ 1900~2500MHz
	✓ 1.42	✓ 5~3000MHz

### 3.3 ATTENUATION (NOMINAL VALUE)

➤ FREQUENCY (MHz)	ATTENUATION	50%/95%coupling loss(±2)
✓ 900	5.7 (dB/100m)	71.79/82.31
✓ 1900	8.7 (dB/100m)	77.43/87.29
✓ 2200	9.2 (dB/100m)	78.65/87.85
✓ 2400	9.9 (dB/100m)	80.00/88.14

### 4. PRINTS

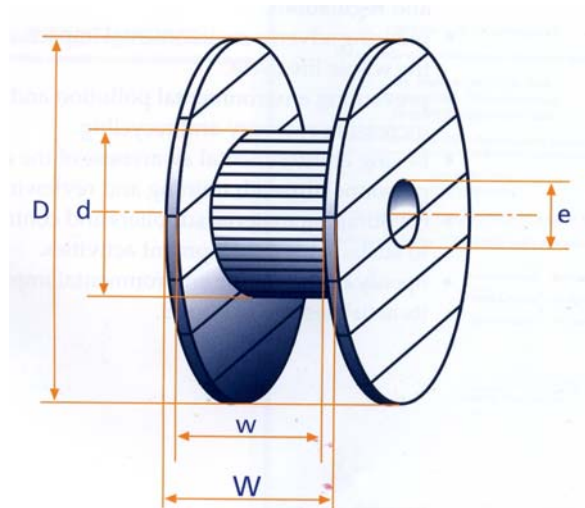
According to customer's requirement.



## 5. PACKING INFORMATION

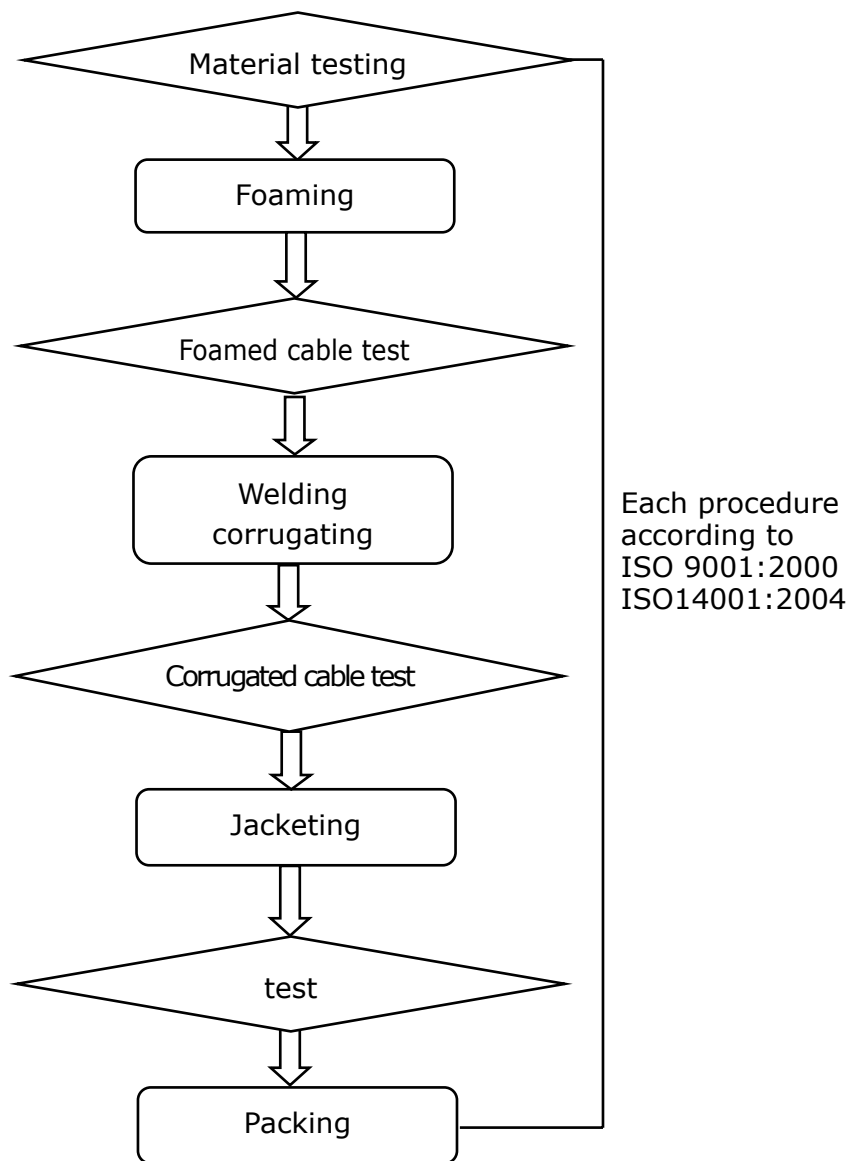
Zhongtian Hitachi RF cables are packed in carton, coiled on bakelite wooden reel. During transportation, right tool should be used to avoid damaging the package, and handle carefully. Cables should be protected from moisture; Cables should be kept away from high temperature condition and spark; Cables should be protected from over bending and crushing; Cables should be protected from mechanical damage.

### Design 1:



SIZE	TYPE	LENGTH (m)	DRUM TYPE	REMARK
7/8"L	HLCTAY-50-22	500	D:1200mm W:710mm	Bakelite&wooden drum
7/8"L	HLCTAYZ-50-22	500	D:1200mm W:710mm	Bakelite&wooden drum
7/8"L	HLCTAY-50-22	1000	D:1500mm W:1080mm	Bakelite&wooden drum
7/8"L	HLCTAYZ-50-22	1000	D:1500mm W:1080mm	Bakelite&wooden drum

## ANNEX 1: RF COAXIAL CABLE MANUFACTURE FLOW



## ANNEX 2: Related Products

- 1、 N or DIN type connector;
- 2、 Jumpers for 7/8"(L)
- 3、 Cable clamps for 7/8"(L)
- 4、 7/8" (L)ground kits used outdoor and indoor;
- 5、 Wall entry system;
- 6、 Cold shrink weather proofing kits;
- 7、 Daub& adhesive tape.