



**PACIFIC ELECTRIC WIRE & CABLE CO., LTD.**

26F, NO. 95, SEC. 2, DUNHUA S RD, TAIPEI CITY 106, TAIWAN, R.O.C

Messrs. ....  
.....  
.....

Date : Nov. 06, 2019

First Issue Date: Nov. 06, 2019

Spec. No. : TCE108003

Rev. No. : A1

Design No. : KJ70N-0042

Purchaser .....  
.....

File No. : 10018463

Total sheets : 5

Our Proforma Invoice No. ....

Subject :

RG6 4K UHD 12GHz COAXIAL CABLE

According to : PEWC Specification TCE108003

*The document just for try order.*

Signed By James Chen

James Chen  
Manager  
Communication Cable Division



# PACIFIC ELECTRIC WIRE & CABLE CO., LTD.

26F, NO. 95, SEC. 2, DUNHUA S RD, TAIPEI CITY 106, TAIWAN, R.O.C

## REVISION HISTORY

Rev.	Date	Description
A1	Nov. 05, 2019	First Issue for No Objection



**SPECIFICATION  
FOR  
RG6 4K UHD 12GHz COAXIAL CABLE**

**1. CABLE CONSTRUCTION**

**Inner Conductor :**

Solid copper wire (in accordance with ASTM B3).

**Dielectric :**

Gas-injected Foam Polyethylene for high velocity of propagation and low loss requirement.

**Outer Conductor :**

Aluminum / PE tape with tinned copper wire will be used for outer conductor to offer the best shield effect and flexible.

**Jacket :**

Lead-free PVC (polyvinyl chloride) compound will be used.

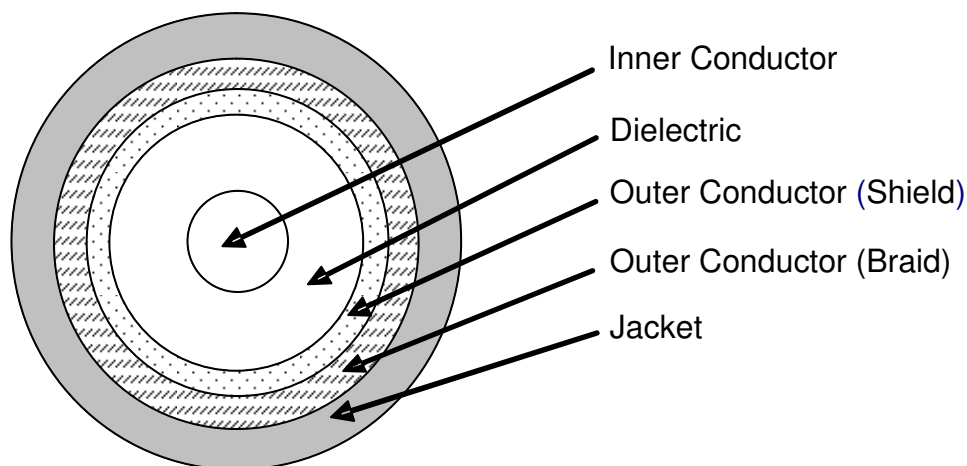
**Cable Marking :**

Cable will be Marking by suitable methods and the content will be include manufacturer name (or abbreviation), product type or by customer requirements.

For example

" PACIFIC RG6 4K UHD 12GHz 75 OHM PVC COAXIAL CABLE"

Fig.1 Cross-section of cable





# PACIFIC ELECTRIC WIRE & CABLE CO., LTD.

26F, NO. 95, SEC. 2, DUNHUA S RD, TAIPEI CITY 106, TAIWAN, R.O.C

⋮

construction type	Inner Conductor		Dielectric		Outer Conductor				Jacket		
	Diameter (Approx.) mm	Material	Diameter (Approx.) mm	Material	Diameter (Approx.) mm	Shield Material	Braid Material	Coverage (Approx.) %	Diameter (Approx.) mm	Color	Material
RG6 4K UHD	1.05	Solid Copper Wire	4.57	Foam PE	5.4	Aluminum/PE Tape	Tinned copper wire	95	7.2	Black	Lead Free PVC

• Dimensions are nominal value

## 2. ELECTRICAL PROPERTIES : (at 20°C)

Spec. Type	Conductor resistance nom. Ω/KM	Characteristic impedance @ 200MHz nom Ω	Capacitance nom pF/M	Voltage withstanding AC. V/1min.
RG6 4K UHD	24.3	75	53.9	1000

Test Item	Unit	Freq. (MHz)	Spec. Value
VSWR	- (nom.)	5~1600	1.25
		1600~4500	1.30
		4500~12000	1.50
Attenuation	dB/100m (nom.)	1	0.75
		3.58	1.44
		5	1.67
		6	1.84
		7	1.94
		10	2.30
		12	2.46
		25	3.41
		55	4.76
		67.5	5.18
		71.5	5.31
		88.5	5.84
		100	6.20
135	6.89		
143	7.09		



# PACIFIC ELECTRIC WIRE & CABLE CO., LTD.

26F, NO. 95, SEC. 2, DUNHUA S RD, TAIPEI CITY 106, TAIWAN, R.O.C

Test Item	Unit	Freq. (MHz)	Spec.Value
Attenuation	dB/100m (nom.)	180	8.01
		270	9.74
		360	11.3
		540	14.1
		720	16.4
		750	16.7
		1000	19.4
		1500	24.0
		2000	27.9
		2250	29.9
		3000	34.8
		4500	43.3
		6000	50.9
12000	75.5		

Note : Maximum value shall be not exceeded 120% of the nominal value.

### **3. PROPERTIES FOR RoHS 2 (recast) directive. (2011/65/EU) & REACH directive.**

#### 3.1 RoHS 2 (recast) directive. (2011/65/EU) :

Chemical substances	Limit of ppm (mg/kg)	Test method
Lead (Pb)	<1000ppm	IEC 62321, Ed. 2 111/95/CDV
Cadmium (Cd)	<100ppm	
Mercury (Hg)	<1000ppm	
Hexavalent chromium (Cr <sup>+6</sup> )	<1000ppm	
Polybrominated biphenyl (PBBs)	<1000ppm	
Polybrominated diphenyl ethers (PBDEs)	<1000ppm	
Hexabromocyclododecane (HBCDD)	<1000ppm	
Bis (2-ethylhexyl)phthalate (DEHP)	<1000ppm	
Butyl benzyl phthalate (BBP)	<1000ppm	
Dibutyl phthalate (DBP)	<1000ppm	

#### 3.2 REACH directive. : 168 Substance of Very High Concern (SVHC) screening.

### **4. UV RESISTANT :**

Add carbon black in JACKET to make the cable has resistant to UV. (Except white jacket)

### **5. PACKING**

5.1 Both ends of the cable will be effectively sealed to prevent the entrance of moisture.

5.2 Coil, plywood reel, wooden drum or crate will be used by options, and suitable protection will be over it.

\*\*\*\*\* END OF SPECIFICATION \*\*\*\*\*