



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

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

Messrs.	.....	Date :	Oct. 19, 2020
	.....	First Issue Date:	Oct. 07, 2020
	.....	Spec. No. :	TCE109006
		Rev. No. :	A2
		Design No. :	KP70N-0153
Purchaser	.....	File No. :	10019240
	.....	Total sheets :	5

Our Proforma Invoice No. ....

Subject :

Mini RG59 COAXIAL CABLE

According to : PEWC Specification TCE109006

Signed By James Chen

James Chen  
Manager  
Communication Cable Division



**REVISION HISTORY**

Rev.	Date	Description
A1	Oct. 07, 2020	First Issue for No Objection
A2	Oct. 19, 2020	<ol style="list-style-type: none"><li>1. Modify Chapter 1_cable marking.</li><li>2. Chapter 2.ELECTRICAL PROPERTIES_ modify frequency</li><li>3. Chapter 3.2.REACH directive_168 Substance of Very High Concern (SVHC) screening revised to 209 Substance of Very High Concern (SVHC) screening.</li></ol>

SPECIFICATION  
FOR  
Mini RG59 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.

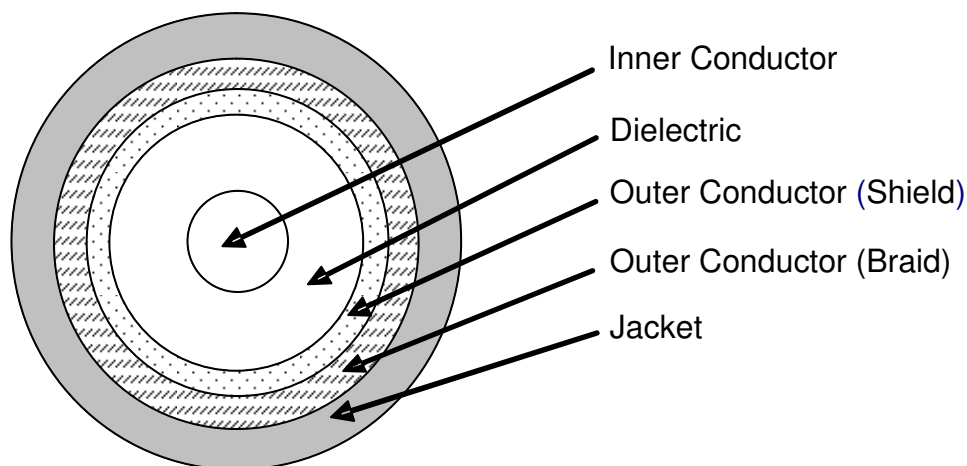
**Cable Marking :**

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 mini RG59 75 OHM COAXIAL CABLE"

Fig.1 Cross-section of cable





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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
mini RG59	0.584	Solid Copper Wire	2.59	Foam PE	3.3	Aluminum/PE Tape	Tinned copper wire	95	4.3	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.
Mini RG59	66.3	75	56	1000

Test Item	Unit	Freq. (MHz)	Spec. Value
VSWR	- (nom.)	5~1600	1.152
		1600~4500	1.196
		4500~6000	1.433
Attenuation	dB/100m (nom.)	1	1.28
		3.58	2.56
		5	3.02
		6	3.28
		7	3.54
		10	3.94
		12	4.27
		25	5.91
		55	8.53
		67.5	9.28
		71.5	9.61
		88.5	10.56
		100	11.12
135	12.60		
143	13.12		



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Test Item	Unit	Freq. (MHz)	Spec.Value
Attenuation	dB/100m (nom.)	180	14.47
		270	17.85
		360	20.80
		540	25.75
		720	29.82
		750	30.45
		1000	35.43
		1500	43.31
		2000	50.20
		2250	53.48
		3000	62.34
		4500	77.43
		6000	90.88

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. : 209 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 \*\*\*\*\*