

# RG Series Cable; Detailed Specification

## QVL: TakiTek

### RG series cable :

The RG series coaxial cable are easy to strip, flexible alternative to standard MIL-spec. Our RG coaxial cable provides the best combination of handling and loss characteristics available in the market today.

With RG, we can approach the electrical performance of MIL-spec with a flex life somewhat closer to standard flexible constructions.

A good selection of standard interface connectors (crimp or clamp style) are available, RG cables can be purchased in bulk reels or predominated and tested cable assemblies.



1. Center conductor: Silver coated copper wire
2. Dielectric: FEP
3. Shield : Tin coated copper wire
4. Jacket : FEP

### Mechanical Characteristics:

Specification Data		
Inner Conductor	Const.	7/0.102
	Material	SA
	Diameter (mm)	0.305
Dielectric Core	Material	FEP
	Diameter (mm)	0.84
Outer Conductor	Const.	16/3/0.1
	Structure	TA
	Diameter (mm)	1.35
Jacket	Material	FEP
	Thickness (mm)	0.23
Outside Diameter (mm)		1.80 +/- 0.10
Impedance ( $\Omega$ )		50 +/- 2
Nominal Attenuation (dB / m)	100 MHz	0.53
	1.5 GHz	2.13
	1.9 GHz	2.42
	2.3 GHz	2.69
	3.0 GHz	3.00
	5 GHz	4.11

SA: Silver-Coated Annealed Copper Wire

TA: Tin-Coated Annealed Copper Wire

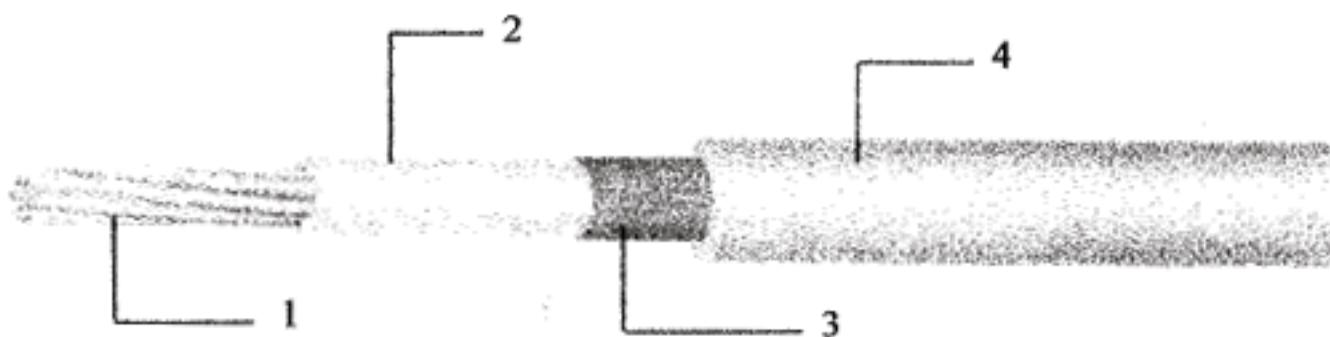
**Nizing Electric Co., Ltd.**

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PRODUCT STANDARD		ISSUED	21. Oct. 2003
		REVISED	

**I - Scope**

This specification presents a FEP insulated high-frequency coaxial cable AWG 30, 1.8 mm O.D. for internal wiring of electronic equipment, such as Computer / Notebook with wireless communication systems.

**II - Construction**



Item	Unit	Details
1. Inner Conductor	Material	— CP-AG
	Composition	No./mm AWG 30 or 7 × 0.1
	Dia. (approx.)	mm 0.305
2. Dielectric	Material	— Extruded FEP
	Nom. O.D.	mm 0.84 ± 0.05
	Color	— Natural
3. Outer Conductor	Material	— Silver coated copper
	Composition	— Braided (16 / 3 / 0.1)
	Dia. (approx)	mm 1.29 ± 0.07
4. Jacket	Material	— Extruded FEP
	Dia.	mm 1.80 ± 0.08
	Color	— Standard color is Light Orange

Note :	MADE BY	
	APPROVALS	

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 QVL: Nizing Electronic., LTD

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**III – Characteristics**

Item	Unit	Specified Value	Note
Temperature Rating	°C	-55 ~ +200	
Voltage Lasting	V	1000	
Dielectric strength	—	Dielectric core: No breakdown at AC 3 kv for 0.2 sec.	Spark test
		Jacket: No breakdown at AC 3 kv for 0.2 sec.	Spark test
Characteristic Impedance	Ω	50 ± 2	TDR method
Capacitance	pF / ft	29.4	
Attenuation. (Max.)	dB/100ft	16.0	100.0 MHz
		33.0	400.0 MHz
		52.0	1.0 GHz
		94.0	3.0 GHz
Approx. Weight	g / m	7.68	

Note :

MADE BY	
APPROVALS	



# Test Report

Report No : CE/2003/A1279

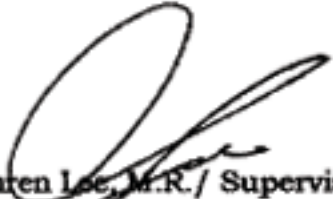
Date : 2003/10/28

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The following merchandise was(were) submitted and identified by the client as :

Type of Product : RG-178 B/U  
Sample Received : 2003/10/21.  
Testing Date : 2003/10/21 TO 2003/10/28

Test Result : - Please see the next page -



Anren Lee, M.R. / Supervisor  
Signed for and on behalf of  
SGS TAIWAN LTD.

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★ Sample to be returned as requested ★

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# Coaxial Cable Material Report Detail



## Test Report

Report No : CE/2003/A1279

Date : 2003/10/28

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### Test Result

PART NAME NO.1 : SEMI-TRANSPARENT ORANGE PLASTIC JACKET  
 PART NAME NO.2 : SILVER COLOR METAL WIRE(SHIELD CONDUCTOR)  
 PART NAME NO.3 : TRANSPARENT PLASTIC JACKET  
 PART NAME NO.4 : SILVER COLOR METAL WIRE(CONDUCTOR)

Test Item(s):	Unit	Method	MDL	Result				Spe
				NO.1	NO.2	NO.3	NO.4	
Chromium VI (Cr+6)	ppm	As per US EPA 7196A and US EPA 3060A.	2	N.D.	N.D.	N.D.	N.D.	---
Cadmium (Cd)	ppm	ICP-AES After As per EN 1122, Method B:2001 or other acid digestion.	2	N.D.	N.D.	N.D.	N.D.	---
Mercury (Hg)	ppm	ICP-AES After As per US EPA 3052 or other acid digestion.	2	N.D.	N.D.	N.D.	N.D.	---
Lead (Pb)	ppm	ICP-AES After As per US EPA 3050B or other acid digestion.	2	N.D.	N.D.	N.D.	N.D.	---

- NOTE: (1) N.D. = Not detected.(<MDL)  
 (2) ppm = mg/kg  
 (3) MDL= Method Detection Limit  
 (4) " ---" = Not Applicable  
 (5) \*=Results shown are of the adjusted analytical results.  
 (6) Negative(-) = Undetectable / Positive(+) = Detectable.

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