# **Detailed Specifications & Technical Data**

## **ENGLISH MEASUREMENT VERSION**



1672J Coax - 75 Ohm High-Frequency Cable Conformable Coax Cable





# **Description:**

29 AWG solid .011" silver-coated copper-covered steel conductor, TFE Teflon® insulation, copper-tin composite shield (100% coverage), PVC jacket.

# **Physical Characteristics (Overall)**

## Conductor

#### AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	29	Solid	SCCCS - Silver-coated Copper-covered Steel	.0114

## Insulation

## **Insulation Material:**

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	TFE - Tetrafluoroethylene	.062

## **Outer Shield**

# **Outer Shield Material:**

Layer #	Type	Outer Shield Material	Coverage (%)
1	Tape	Copper Foil	100
2	Braid	Tin-Filled Composite	100

# **Outer Jacket**

# **Outer Jacket Material:**

# Outer Jacket Material PVC - Polyvinyl Chloride

# **Overall Cabling**

Overall Nominal Diameter: 0.127 in.

# Mechanical Characteristics (Overall) Operating Temperature Range: -40°C To +105°C UL Temperature Rating: 105°C Non-UL Temperature Rating: 105°C Bulk Cable Weight: 16 lbs/1000 ft. Max. Recommended Pulling Tension: 20 lbs. Min. Bend Radius (Install)/Minor Axis: 0.125 in. Min. Bend Radius (Continuous Flexing): 0.375 in.

# **Applicable Specifications and Agency Compliance (Overall)**

# **Applicable Standards & Environmental Programs**

AWM Specification:	UL Style 10245
EU CE Mark:	No
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005

Page 1 of 3 10-27-2008

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EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Flame Test	
Other Flame Test:	Horizontal Wire
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Plenum/Non-Plenum	

No

# **Electrical Characteristics (Overall)**

# Nom. Characteristic Impedance:

Impedance (Ohm) 75

Plenum (Y/N):

Nom. Inductance:

Inductance (µH/ft) 0.109

## Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft) 19.5

# Nominal Velocity of Propagation:

**VP (%)** 69.5

# Nominal Delay:

Delay (ns/ft) 1.46

## Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 205.0

# Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

# Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	1.6
10	1.8
50	4.1
100	6.5
200	9.0
400	12.8
700	18.0
1000	22.1

# Nom. Power Rating:

Freq. (MHz)	Rating (W)
1	520
10	295
50	195
100	160
200	140
400	130
700	127

Page 2 of 3 10-27-2008

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1000 125

Max. Operating Voltage - UL:

Voltage 30 V RMS

Max. Operating Voltage - Non-UL:

Voltage 900 V RMS

Minimum Structural Return Loss:

Description	Freq. (MHz)	Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
		10	1000	25

## Misc. Information (Overall)

Other Description: Update Temp Rating, 08/24/04 BAG: Corrected the core diameter. 09/20/05

BAG: Updated attenuation based upon measurements.

# **Notes (Overall)**

Notes: US Patents 4, 694, 122 & 5, 293, 001. Patents held in the U.S., Singapore, Australia, Germany, France, and England, Patent pending in Japan. Teflon® is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.

# **Put Ups and Colors:**

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1672J 0101000	1,000 FT	17.000 LB	BLACK	V	#29 TFE BRD TINNED COAX PVC
1672J 010500	500 FT	9.500 LB	BLACK	E	#29 TFE BRD TINNED COAX PVC
1672J 368500	500 FT	9.500 LB	CLEAR, TRANSPARENT	CE	#29 TFE BRD TINNED COAX PVC

#### Notes:

C = CRATE REEL PUT-UP.

E = MAY CONTAIN MORE THAN 1 PIECE. MINIMUM LENGTH OF ANY ONE PIECE IS 25'

V = 250' PUT-UP EXACT LENGTH MAXIMUM OF 3 PIECESMINIMUM LENGTH 50'500' PUT-UP EXACT LENGTH MAXIMUM OF 5 PIECESMINIMUM LENGTH 50'

Revision Number: 4 Revision Date: 05-14-2007

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Page 3 of 3 10-27-2008

# **Conformable® Coax Cable**

75 Ohm High-Frequency Video Cables

Description	Part	UL NEC/ C(UL) CEC	Standard	Lengths	Stan Unit W		Conductor (stranding)	_	ninal e OD	Shielding Materials	Nomir	ninal OD Nom		Nom. Vel.	. Nominal Capacitance		Nominal Attenuation		
Description	No.	Type	Ft.	m	Lbs.	kg	Diameter Nom. DCR	Inch	mm	Nom. DCR	Inch	mm	(Ω)	of Prop.	pF/Ft.	pF/m	MHz	dB/ 100 Ft.	dB/ 100m
<b>29 AWG</b> S	29 AWG Solid .011" Silver-coated Copper-covered Steel Conductor • Copper-Tin Composite Shield (100% Coverage)																		
TFE Teflo	n® Ins	ulation	Unjac	keted															
UL AWM Style 10245 (30V 105°C)	1672A*	<u> </u>	500† 1000†	152.4 304.8	7.5 14.0	3.4 6.4	29 AWG (solid) .011" SCCCS 205.0Ω/M' 672.4Ω/km	.062	1.58	CT Composite 100% Shield Coverage 10.0Ω/M' 32.8Ω/km	.087	2.21	75	69.5%	19.5	64.0	1 10 50 100 200 400 700	1.6 1.8 4.1 6.5 9.0 12.8 18.0	5.3 5.9 13.5 21.3 29.5 42.0 59.1
							07 E. 1557 Kill			02.011/ KIII							1000	22.1	72.5
TFE Teflo	n Insı	ılation •	PVC J	acket	(Black	or C	lear)												
UL AWM Style 10245 (30V 105°C)	1672J*	_	100 ††4 500 †† 1000 †	30.5 152.4 304.8	3.1 9.5 17.0	1.4 4.3 7.7	29 AWG (solid) .011" SCCCS 205.0 $\Omega$ /M' 672.6 $\Omega$ /km	.062	1.58	CT Composite 100% Shield Coverage 10.0 $\Omega$ /M′ 32.8 $\Omega$ /km	.127	3.23	75	69.5%	19.5	64.0	1 10 50 100 200 400 700 1000	1.6 1.8 4.1 6.5 9.0 12.8 18.0 22.1	5.3 5.9 13.5 21.3 29.5 42.0 59.1 72.5

▲100 ft. put-up available in Clear only.

29 AWG Solid .011" Silver-plated Copper Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon Insulation • Unjacketed																			
UL AWM Style 10245 (30V 105°C)	1672B*	_	100 †† 500 †† 1000 ††	30.5 152.4 304.8	2.5 7.5 14.0	1.1 3.4 6.4	29 AWG (solid) .011" SPC 11.0Ω/M' 36.1Ω/km	.062	1.58	CT Composite 100% Shield Coverage 10.0Ω/M' 32.8Ω/km	.087	2.21	75	69.5%	19.5	64.0	1 10 50 100 200 400 700 1000	1.6 1.8 4.1 6.5 9.0 12.8 18.0 22.1	5.3 5.9 13.5 21.3 29.5 42.0 59.1 72.5
Non-ferrous design	an.																		

CT = Copper Tin • DCR = DC Resistance • SCCCS = Silver-coated Copper-covered Steel • SPC = Silver-plated Copper • TFE = Tetra Fluoroethylene





<sup>\*</sup> Protected by one or more of U.S. Patent Nos. 4,694,122 and 5,292,001. Patent held in the U.S., Singapore, Australia, Germany, France and England. Patent pending in Japan.

<sup>† 250</sup> ft. put-up: Exact 3 pieces (maximum), 50 feet minimum length 500 ft. put-up: Exact 5 pieces (maximum), 50 feet minimum length 1000 ft. put-up: Exact 8 pieces (maximum), 50 feet minimum length

<sup>††</sup>May contain more than 1 piece, minimum length of any one piece is 25 ft.