



Description:

RG-405/U type, 24 AWG solid .020" silver-plated copper-covered steel conductor, TFE Teflon® insulation, copper-tin composite shield (100% coverage), unjacketed.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	24	Solid	SPCCS - Silver Plated Copper Covered Steel	.020

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
Unjacketed

Overall Cabling

Overall Nominal Diameter: 0.085 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +200°C
UL Temperature Rating:	105°C (UL AWM Style 10245)
Non-UL Temperature Rating:	200°C
Bulk Cable Weight:	11.900 lbs/1000 ft.
Max. Recommended Pulling Tension:	26 lbs.
Min. Bend Radius (Install)/Minor Axis:	0.120 in.
Min. Bend Radius (Continuous Flexing):	0.370 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

AWM Specification:	UL Style 10245 (30 V 105°C)
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2005

1671A Coax - 50 Ohm Microwave Cable

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
RG Type:	405/U

Flame Test

Other Flame Test:	Horizontal Wire
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Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

50

Nom. Inductance:

Inductance (µH/ft)

.07

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

29.5

Nominal Velocity of Propagation:

VP (%)

69.5

Nominal Delay:

Delay (ns/ft)

1.46

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

64.2

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

10.2

Maximum VSWR:

Freq. (MHz)	Max. VSWR
500	1.1:1
20000	1.3:1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
500	15.0
1000	22.2
2000	32.8
3000	41.2
5000	54.9
7000	66.4
10000	81.2
15000	102
18000	113
20000	120

Max. Power Rating:

1671A Coax - 50 Ohm Microwave Cable

Freq. (MHz)	Rating (W)
500	180
1000	119
2000	79
3000	62
5000	46
7000	37
10000	30
15000	24
18000	21
20000	20

Max. Operating Voltage - UL:

Voltage
30 V RMS (UL AWM Style 10245)

Max. Operating Voltage - Non-UL:

Voltage
1500 V RMS

Misc. Information (Overall)

Other Description: Updated the VSWR Field, Corrected Temp rating. 10-03-05 BAG: Adjusted attenuation

Notes (Overall)

Notes: US Patents 4, 694, 122 & 5, 293, 001. Patent 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
1671A TIN100	100 FT	1.900 LB	TIN - COLOR		#24 TFE BRD TINNED COAX
1671A TIN1000	1,000 FT	12.000 LB	TIN - COLOR	V	#24 TFE BRD TINNED COAX
1671A TIN50	50 FT	1.100 LB	TIN - COLOR		#24 TFE BRD TINNED COAX
1671A TIN500	500 FT	6.500 LB	TIN - COLOR	V	#24 TFE BRD TINNED COAX

Notes:

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

Conformable® Coax Cable

50 Ohm Microwave Cables

Description	Part No.	UL NEC/ C(UL) CEC Type	Standard Lengths		Standard Unit Weight		Conductor (stranding) Diameter Nom. DCR	Nominal Core OD		Shielding Materials Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			Ft.	m	Lbs.	kg		Inch	mm		Inch	mm			pF/Ft.	pF/m	MHz	dB/100 Ft.	dB/100m

M17/151 Type • 29 AWG Solid .011" Silver-plated Copper-covered Steel Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon® Insulation • Unjacketed																			
UL AWM	1674A*	—	50	15.2	.2	.1	29 AWG	.034	.85	CT	.047	1.19	50	69.5%	29.5	96.8	500	25.0	82.0
Style 10245			100	30.5	.4	.2	(solid)			Composite							1000	36.7	120.3
(30V 105°C)			500	152.4	2.0	.9	.011"			100% Shield							2000	53.8	176.5
			1000	304.8	5.0	2.3	SPCCS			Coverage							3000	67.3	220.8
							205.0Ω/M'			8.0Ω/M'							5000	89.2	292.8
							672.4Ω/km			26.2Ω/km							7000	107.5	352.6
																	10000	130.9	429.5
																	15000	163.8	537.4
																	18000	181.1	594.3
																	20000	192.0	630.0



M17/151 Type • 29 AWG Solid .011" Silver-plated Copper Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon Insulation • Unjacketed																			
UL AWM	1674B*	—	100††	30.5	.4	.2	29 AWG	.034	.85	CT	.047	1.19	50	69.5%	29.5	96.8	500	25.0	82.0
Style 10245			500††	152.4	2.0	.9	(solid)			Composite							1000	36.7	120.3
(30V 105°C)			1000††	304.8	5.0	2.3	.011"			100% Shield							2000	53.8	176.5
							SPC			Coverage							3000	67.3	220.8
							81.2Ω/M'			8.0Ω/M'							5000	89.2	292.8
							266.4Ω/km			26.2Ω/km							7000	107.5	352.6
																	10000	130.9	429.5
																	15000	163.8	537.4
																	18000	181.1	594.3
																	20000	192.0	630.0



RG-405/U Type • 24 AWG Solid .020" Silver-plated Copper-covered Steel Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon Insulation • Unjacketed																			
UL AWM	1671A*	—	50	15.2	2.0	.9	24 AWG	.062	1.57	CT	.085	2.16	50	69.5%	29.5	96.8	500	15.0	49.2
Style 10245			100	30.5	2.5	1.1	(solid)			Composite							1000	22.2	72.8
(30V 105°C)			500†	152.4	7.5	3.4	.020"			100% Shield							2000	32.8	107.6
			1000†	304.8	14.0	6.4	SPCCS			Coverage							3000	41.2	135.2
							64.2Ω/M'			10.2Ω/M'							5000	54.9	180.1
							210.6Ω/km			33.5Ω/km							7000	66.4	217.9
																	10000	81.2	266.4
																	15000	102.0	334.7
																	18000	113.0	370.8
																	20000	120.0	393.7

Suitable for Outdoor applications.

TFE Teflon Insulation • PVC Jacket (Black or Clear)																			
UL AWM	1671J*	—	100††	30.5	2.9	1.3	24 AWG	.062	1.57	CT	.127	3.23	50	69.5%	29.5	96.8	500	15.0	49.2
Style 10245			500†	152.4	9.5	4.7	(solid)			Composite							1000	22.2	72.8
(30V 105°C)			1000†	304.8	17.0	7.7	.020"			100% Shield							2000	32.8	107.6
							SPCCS			Coverage							3000	41.2	135.2
							64.2Ω/M'			10.2Ω/M'							5000	54.9	180.1
							210.6Ω/km			33.5Ω/km							7000	66.4	217.9
																	10000	81.2	266.4
																	15000	102.0	334.7
																	18000	113.0	370.8
																	20000	120.0	393.7

*100 ft. put-up available in Black only.
Suitable for Outdoor applications.

RG-405/U Type • 24 AWG Solid .020" Silver-plated Copper Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon Insulation • Unjacketed																			
UL AWM	1671B	—	500††	152.4	7.0	3.2	24 AWG	.062	1.57	CT	.085	2.16	50	69.5%	29.5	96.8	500	15.0	49.2
Style 10245			1000††	304.8	13.0	6.0	(solid)			Composite							1000	22.2	72.8
(30V 105°C)							.020"			100% Shield							2000	32.8	107.6
							SPC			Coverage							3000	41.2	135.2
							25.7Ω/M'			10.2Ω/M'							5000	54.9	180.1
							84.3Ω/km			33.5Ω/km							7000	66.4	217.9
																	10000	81.2	266.4
																	15000	102.0	334.7
																	18000	113.0	370.8
																	20000	120.0	393.7

Suitable for Outdoor applications.

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

*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.

†250 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

††May contain more than one piece. Min. length of any one piece is 25 ft.

Teflon is a Dupont trademark.