



Description:

RG-401/U type, 14 AWG solid .065" silver-plated copper conductor, TFE Teflon® insulation, copper-tin composite shield (100% coverage), unjacketed.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	14	Solid	SPC - Silver Plated Copper	.065

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	TFE - Tetrafluoroethylene	.210

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: 0.246 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -70°C To +200°C

UL Temperature Rating: 105°C

Non-UL Temperature Rating: 200°C

Bulk Cable Weight: 81 lbs/1000 ft.

Max. Recommended Pulling Tension: 122 lbs.

Min. Bend Radius (Install)/Minor Axis: 0.370 in.

Min. Bend Radius (Continuous Flexing): 1.120 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

AWM Specification: UL Style 10245

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

1675A 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:	401/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)

0.070

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

29.6

Nominal Velocity of Propagation:

VP (%)

69.5

Nominal Delay:

Delay (ns/ft)

1.46

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

2.5

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

8

Maximum VSWR:

Description	Freq. (MHz)	Max. VSWR
Ramp Function, End Points	400	1.1
	1800	1.38

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
400	3.8
500	4.4
1000	6.8
2000	10.4
3000	13.4
5000	18.5
7000	22.8
10000	28.4
15000	36.6
18000	41.0

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
400	5.0
500	5.7
1000	8.8
3000	17.3
5000	23.8
10000	36.6
18000	52.8

Nom. Power Rating:

Freq. (MHz)	Rating (W)
400	1900
500	1665
1000	1105
2000	733
3000	577
5000	427
7000	350
10000	283
15000	223
18000	200

Max. Operating Voltage - UL:

Voltage
30 V RMS

Max. Operating Voltage - Non-UL:

Voltage
2900 V RMS

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
1675A TIN100	100 FT	8.100 LB	TIN - COLOR	E	#14 TFE CU FS BRD TINNED COAX
1675A TIN500	500 FT	40.500 LB	TIN - COLOR	C E	#14 TFE CU FS BRD TINNED COAX

Notes:

C = CRATE REEL PUT-UP.

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

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

RG-402/U Type • 19 AWG Solid .036" Silver-plated Copper-covered Steel Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon® Insulation • Unjacketed																			
UL AWM	1673A*	—	50	15.2	3.3	1.5	19 AWG	.116	2.95	CT	.138	3.51	50	69.5%	29.5	96.8	500	8.0	26.2
Style 10245 (30V 105°C)			100	30.5	3.9	1.8	(solid)			Composite							1000	12.0	39.4
			250†	76.2	8.0	3.6	.036"			100% Shield							2000	18.1	59.4
			500	152.4	15.0	6.8	SPCCS			Coverage							3000	22.9	75.1
							20.5Ω/M'			4.5Ω/M'							5000	31.0	101.7
							67.3Ω/km			14.8Ω/km							7000	37.8	124.0
																	10000	46.6	152.9
																	15000	59.1	193.9
																	18000	65.8	215.9
																	20000	70.0	229.7



TFE Teflon Insulation • Black PVC Jacket

UL AWM	1673J*	—	100	30.5	5.1	2.3	19 AWG	.116	2.95	CT	.178	4.52	50	69.5%	29.5	96.8	500	8.0	26.2
Style 10245 (30V 105°C)			500†	152.4	17.5	8.0	(solid)			Composite							1000	12.0	39.4
							.036"			100% Shield							2000	18.1	59.4
							SPCCS			Coverage							3000	22.9	75.1
							20.5Ω/M'			4.5Ω/M'							5000	31.0	101.7
							67.3Ω/km			14.8Ω/km							7000	37.8	124.0
																	10000	46.6	152.9
																	15000	59.1	193.9
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RG-402/U Type • 19 AWG Solid .036" Silver-plated Copper Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon Insulation • Unjacketed																			
UL AWM	1673B*	—	100††	30.5	3.9	1.8	19 AWG	.116	2.95	CT	.138	3.51	50	69.5%	29.5	96.8	500	8.0	26.2
Style 10245 (30V 105°C)			250††	76.2	8.0	3.6	(solid)			Composite							1000	12.0	39.4
			500††	152.4	14.5	6.6	.036"			100% Shield							2000	18.1	59.4
							SPC			Coverage							3000	22.9	75.1
							7.9Ω/M'			4.5Ω/M'							5000	31.0	101.7
							25.9Ω/km			14.8Ω/km							7000	37.8	124.0
																	10000	46.6	152.9
																	15000	59.1	193.9
																	18000	65.8	215.9
																	20000	70.0	229.7



RG-401/U Type • 14 AWG Solid .065" Silver-plated Copper Conductor • Copper-Tin Composite Shield (100% Coverage)

TFE Teflon Insulation • Unjacketed																			
UL AWM	1675A*	—	50†	15.2	4.1	1.8	14 AWG	.210	5.33	CT	.246	6.25	50	69.5%	29.6	97.1	400	3.8	12.5
Style 10245 (30V 105°C)			100††	30.5	8.1	3.7	(solid)			Composite							500	4.4	14.4
			250††	76.2	20.3	9.2	.065"			100% Shield							1000	6.8	22.3
			500††	152.4	40.5	18.4	SPC			Coverage							2000	10.4	34.1
							2.5Ω/M'			8.0Ω/M'							3000	13.4	44.0
							8.2Ω/km			26.2Ω/km							5000	18.5	60.7
																	7000	22.8	74.8
																	10000	28.4	93.2
																	15000	36.6	120.1
																	18000	41.0	134.5



CT = Copper-Tin • DCR = DC Resistance • SPCCS = Silver-plated Copper-covered Steel • SPC = Silver-plated Copper • 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, minimum length of any one piece is 25 ft.

Teflon is a DuPont trademark.