



Description:

RG-58A/U type, 20 AWG solid .033" bare copper conductor, plenum, FEP teflon insulation, tinned copper braid shield (95% coverage), FEP teflon jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	Solid	BC - Bare Copper	.032

Insulation

Insulation Material:

Insulation Trade Name	Insulation Material	Dia. (in.)
Teflon®	FEP - Fluorinated Ethylene Propylene	.107

Outer Shield

Outer Shield Material:

Type	Outer Shield Material	Coverage (%)
Braid	TC - Tinned Copper	95

Outer Jacket

Outer Jacket Material:

Outer Jacket Trade Name	Outer Jacket Material
Teflon®	FEP - Fluorinated Ethylene Propylene

Overall Cabling

Overall Nominal Diameter: 0.159 in.

Mechanical Characteristics (Overall)

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

UL Temperature Rating: 200°C

Bulk Cable Weight: 21 lbs/1000 ft.

Max. Recommended Pulling Tension: 47 lbs.

Min. Bend Radius (Install)/Minor Axis: 2 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMP

CEC/C(UL) Specification: CMP

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): 04/01/2005

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:	58/U

Flame Test

UL Flame Test:	NFPA 262
C(UL) Flame Test:	FT6

Plenum/Non-Plenum

Plenum (Y/N):	Yes
Plenum Number:	8240

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)

53

Nom. Inductance:

Inductance (µH/ft)

0.088

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)

26.4

Nominal Velocity of Propagation:

VP (%)

69.5

Nominal Delay:

Delay (ns/ft)

1.48

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

10.2

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)

6.7

Nom. Attenuation:

Freq. (MHz) Attenuation (dB/100 ft.)

1	0.5
10	1.2
50	3.0
100	4.3
200	6.4
400	9.7
700	13.7
900	16.1
1000	17.3

Nom. Power Rating:

Freq. (MHz) Rating (W)

1	4798.7
10	1937.2
50	782.4
100	542.2
200	370.3
400	248.5
700	177.7
900	153.0

1000	143.2
------	-------

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Operating Voltage - Non-UL:

Voltage
1400 V RMS

Notes (Overall)

Notes: 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
88240 0101000	1,000 FT	24.000 LB	BLACK	C	#20 COAX FEP RG58/U
88240 010500	500 FT	12.000 LB	BLACK	C	#20 COAX FEP RG58/U

Notes:

C = CRATE REEL PUT-UP.

50 Ohm Transmission and Computer Cable

RG-58A/U Type

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-58A/U Type • 20 AWG Stranded (19x32) .037" Tinned Copper Conductor • Tinned Copper Braid Shield (96% Coverage)

Foam Polyethylene Insulation • Black or White PVC Jacket																			
UL AWM	8219	NEC:	U-500	U-152.4	13.5	6.1	20 AWG	.114	2.90	TC Braid	.194	4.93	53.5	73%	26.5	86.9	1	.4	1.2
Style 1354		CM	500 [▲]	152.4	13.0	6.0	(19x32)			96% Shield							10	1.3	4.3
(30V 80°C)		CEC:	U-1000 [▲]	U-304.8	27.0	12.3	.037"			Coverage							50	3.1	10.2
		CM	1000	304.8	26.0	11.8	TC			4.1Ω/M'							100	4.5	14.8
						8.8Ω/M'			13.4Ω/km							200	6.6	21.7	
						28.9Ω/km										400	10.0	32.8	
																700	14.2	46.6	
																900	16.6	54.5	
																1000	18.1	59.4	

P-MSHA • SC-182/5**

*500 ft. and U-1000 ft. put-ups available in Black only. Black jacket suitable for Aerial (when supported by a messenger) and Outdoor applications.

RG-58A/U Type • 20 AWG Stranded (19x32) .037" Tinned Copper Conductor • Duobond® II* + Tinned Copper Braid Shield (55% Coverage)

Foam Polyethylene Insulation • Black PVC Jacket																			
UL AWM	9311**	NEC:	500	152.4	10.5	4.8	20 AWG	.114	2.90	Duobond II*	.193	4.90	52	75%	26.0	85.3	1	.5	1.6
Style 1354		CM	U-1000	U-304.8	23.0	10.5	(19x32)			+ 55% TC							10	1.5	4.9
(30V 80°C)		CEC:	1000	304.8	21.0	9.5	.037"			Braid							50	2.9	9.5
		CM					TC			17.0Ω/M'							100	4.0	13.1
						8.8Ω/M'			55.8Ω/km							200	5.7	18.7	
						28.9Ω/km										400	8.5	27.9	
																700	12.2	40.0	
																900	14.5	47.6	
																1000	15.8	51.8	

RG-58A/U Type • 20 AWG Stranded (19x33) .035" Tinned Copper Conductor • Tinned Copper Braid Shield (95% Coverage)

Polyethylene Insulation • Black PVC Jacket																			
75°C	8259	—	100	30.5	3.5	1.6	20 AWG	.116	2.95	TC Braid	.192	4.88	50	66%	30.8	101.0	1	.4	1.4
			U-500	U-152.4	13.5	6.1	(19x33)			95% Shield							10	1.5	4.9
			500	152.4	13.5	6.1	.035"			Coverage							50	3.7	12.1
			U-1000	U-304.8	25.0	11.3	TC			4.1Ω/M'							100	5.4	17.7
			1000	304.8	26.0	11.8	10.8Ω/M'			13.4Ω/km						200	8.1	26.6	
							35.4Ω/km									400	12.4	40.7	
																700	17.7	58.1	
																900	21.1	69.2	
																1000	22.8	74.8	

Suitable for Aerial (when supported by a messenger) and Outdoor applications.

RG-58A/U Type • 20 AWG Solid Bare Copper Conductor • Tinned Copper Braid Shield (95% Coverage)

Polyethylene Insulation • Black PVC Jacket																			
UL AWM	8240	NEC:	100	30.5	3.6	1.6	20 AWG	.116	2.95	TC Braid	.193	4.90	51.5	66%	28.5	93.5	1	.3	1.1
Style 1354		CMX	U-500	U-152.4	14.0	6.4	(solid)			95% Shield							10	1.1	3.6
(30V 80°C)		CEC:	500	152.4	13.0	5.9	.033"			Coverage							50	2.5	8.2
VW-1		CMX	U-1000	U-304.8	27.0	12.3	BC			4.1Ω/M'							100	3.8	12.5
			1000	304.8	26.0	11.8	10.0Ω/M'			13.4Ω/km							200	5.6	18.4
							32.8Ω/km										400	8.4	27.6
																	700	11.7	38.4
																	900	13.7	44.9
																	1000	14.5	47.6

Suitable for Aerial (when supported by a messenger) and Outdoor applications.

Plenum • FEP Teflon® Insulation • Black FEP Teflon Jacket																			
200°C	88240	NEC:	500 [†]	152.4	12.0	5.4	20 AWG	.107	2.72	TC Braid	.159	4.04	53.5	69.5%	26.4	86.6	1	.5	1.6
		CMP	1000 [†]	304.8	24.0	10.9	(solid)			95% Shield							10	1.2	3.9
		CEC:					.032"			Coverage							50	3.0	9.8
		CMP FT6					BC			6.7Ω/M'							100	4.3	14.2
						10.2Ω/M'			22.0Ω/km								200	6.4	21.0
						33.5Ω/km											400	9.7	31.7
																	700	13.7	45.0
																	900	16.1	52.8
																	1000	17.3	56.6

Plenum • FEP Teflon Insulation • Natural Flamarrest® Jacket																			
75°C	82240	NEC:	U-500 [†]	U-152.4	13.5	6.1	20 AWG	.107	2.72	TC Braid	.159	4.04	53.5	69.5%	26.4	86.6	1	.5	1.6
		CMP	U-1000 [†]	U-304.8	26.0	11.8	(solid)			95% Shield							10	1.2	3.9
		CEC:	1000 [†]	304.8	24.0	10.9	.032"			Coverage							50	3.0	9.8
		CMP FT6					BC			6.7Ω/M'							100	4.3	14.2
						10.2Ω/M'			22.0Ω/km								200	6.4	21.0
						33.5Ω/km											400	9.7	31.7
																	700	13.7	45.0
																	900	16.1	52.8
																	1000	17.3	56.6

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • TC = Tinned Copper

*Duobond II = Bonded Duofoil® (100% coverage) + aluminum braid (67% coverage).

**Pennsylvania Department of Environmental Resource and United States Mine Safety and Health Administration certification.

†Spools and/or UnReel® cartons are one piece, but length may vary ±10% from length shown.

Teflon is a DuPont trademark.