



Description:

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

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	Solid	BC - Bare Copper	.033

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
PE - Polyethylene	.116

Outer Shield

Outer Shield Material:

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

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 0.193 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +75°C
UL Temperature Rating:	80°C (UL AWM Style 1354)
Bulk Cable Weight:	25 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:	CMX
CEC/C(UL) Specification:	CMX
AWM Specification:	UL Style 1354 (30 V 80°C)
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):	01/01/2004
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:	UL1685 UL Loading, VW-1
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Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Aerial:	Yes - when supported by a messenger wire

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	88240, 82240

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)
52

Nom. Inductance:

Inductance (µH/ft)
0.080

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
28.5

Nominal Velocity of Propagation:

VP (%)
66

Nominal Delay:

Delay (ns/ft)
1.54

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
10.0

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
4.1

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	0.3
10	1.1
50	2.5
100	3.8
200	5.6
400	8.4
700	11.7
900	13.7
1000	14.5

Max. Power Rating:

Freq. (MHz)	Rating (W)
50	530
100	350

400	160
1000	90

Max. Operating Voltage - UL:

Voltage
300 V RMS (CMX)
30 V RMS (UL AWM Style 1354)

Max. Operating Voltage - Non-UL:

Voltage
1400 V RMS

Other Electrical Characteristic 1: Actual Impedance specification is 51.5 +/- 1.5 ohms.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
8240 010U1000	1,000 FT	27.000 LB	BLACK		#20 PE BRD FRPVC
8240 010U500	500 FT	14.000 LB	BLACK		#20 PE BRD FRPVC
8240 010100	100 FT	3.300 LB	BLACK		#20 PE BRD FRPVC
8240 0101000	1,000 FT	26.000 LB	BLACK	C	#20 PE BRD FRPVC
8240 010500	500 FT	13.000 LB	BLACK	C	#20 PE BRD FRPVC

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 Style 1354 (30V 80°C)	8219	NEC: CM CEC: CM	U-500 500 [▲] U-1000 [▲] 1000	U-152.4 152.4 U-304.8 304.8	13.5 13.0 27.0 26.0	6.1 6.0 12.3 11.8	20 AWG (19x32) .037" TC 8.8Ω/M' 28.9Ω/km	.114 2.90	2.90	TC Braid 96% Shield Coverage 4.1Ω/M' 13.4Ω/km	.194 4.93	4.93	53.5	73%	26.5 86.9	1 10 50 100 200 400 700 900 1000	.4 1.3 3.1 4.5 6.6 10.0 14.2 16.6 18.1	1.2 4.3 10.2 14.8 21.7 32.8 46.6 54.5 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 Style 1354 (30V 80°C)	9311**	NEC: CM CEC: CM	500 U-1000 1000	152.4 U-304.8 304.8	10.5 23.0 21.0	4.8 10.5 9.5	20 AWG (19x32) .037" TC 8.8Ω/M' 28.9Ω/km	.114 2.90	2.90	Duobond II* + 55% TC Braid 17.0Ω/M' 55.8Ω/km	.193 4.90	4.90	52	75%	26.0 85.3	1 10 50 100 200 400 700 900 1000	.5 1.5 2.9 4.0 5.7 8.5 12.2 14.5 15.8	1.6 4.9 9.5 13.1 18.7 27.9 40.0 47.6 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 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.5 13.5 13.5 25.0 26.0	1.6 6.1 6.1 11.3 11.8	20 AWG (19x33) .035" TC 10.8Ω/M' 35.4Ω/km	.116 2.95	2.95	TC Braid 95% Shield Coverage 4.1Ω/M' 13.4Ω/km	.192 4.88	4.88	50	66%	30.8 101.0	1 10 50 100 200 400 700 900 1000	.4 1.5 3.7 5.4 8.1 12.4 17.7 21.1 22.8	1.4 4.9 12.1 17.7 26.6 40.7 58.1 69.2 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 Style 1354 (30V 80°C) VW-1	8240	NEC: CMX CEC: CMX	100 U-500 500 U-1000 1000	30.5 U-152.4 152.4 U-304.8 304.8	3.6 14.0 13.0 27.0 26.0	1.6 6.4 5.9 12.3 11.8	20 AWG (solid) .033" BC 10.0Ω/M' 32.8Ω/km	.116 2.95	2.95	TC Braid 95% Shield Coverage 4.1Ω/M' 13.4Ω/km	.193 4.90	4.90	51.5	66%	28.5 93.5	1 10 50 100 200 400 700 900 1000	.3 1.1 2.5 3.8 5.6 8.4 11.7 13.7 14.5	1.1 3.6 8.2 12.5 18.4 27.6 38.4 44.9 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: CMP CEC: CMP FT6	500 [†] 1000 [†]	152.4 304.8	12.0 24.0	5.4 10.9	20 AWG (solid) .032" BC 10.2Ω/M' 33.5Ω/km	.107 2.72	2.72	TC Braid 95% Shield Coverage 6.7Ω/M' 22.0Ω/km	.159 4.04	4.04	53.5	69.5%	26.4 86.6	1 10 50 100 200 400 700 900 1000	.5 1.2 3.0 4.3 6.4 9.7 13.7 16.1 17.3	1.6 3.9 9.8 14.2 21.0 31.7 45.0 52.8 56.6

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