Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

9907 Coax - Coaxial Cable - Thinnet 10Base2 Ethernet

Description:

20 AWG stranded (19x32) .037" tinned copper conductor, foam polyethylene insulation, Duobond® II (100% coverage) plus an overall tinned copper braid shield (93% coverage), PVC jacket.

Usage (Overall)

Suitable Applications:	Thin Ethernet

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	19x32	TC - Tinned Copper	.037

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FHDPE - Foam High Density Polyethylene	.102

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	TC - Tinned Copper	93

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter:	0.185 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:	-40°C To +80°C
UL Temperature Rating:	60°C (UL AWM Style 1354)
Bulk Cable Weight:	22.300 lbs/1000 ft.
Max. Recommended Pulling Tension:	45 lbs.
Min. Bend Radius (Install)/Minor Axis:	1.800 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CM, CL2
CEC/C(UL) Specification:	CM
AWM Specification:	UL Style 1354 (30 V 60°C)
IEEE Specification:	IEEE802.3 10Base2
Other Standards:	ISO8802.3 10Base2

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):	01/01/2004
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
Customer Part Number Reference Specification:	DEC Part No. 17-01248-00
RG Type:	58A/U

Flame Test

UL Flame Test:	UL1685 UL Loading

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	82907, 89907

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm)	Tolerance (Ohms)
50	+/- 2

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
25.4

Nominal Velocity of Propagation:

VP (%)
80

Nominal Delay:

Delay (ns/ft)
1.27

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
8.8

Maximum Loop Resistance:

Resistance (Ohm/1000 ft)
15.24

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
5.8

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	.43
10	1.3
50	2.91
100	4.2
200	6.1
400	8.9
700	12.1
900	13.9
1000	14.8

Max. Operating Voltage - UL:

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

Notes (Overall)

Notes: Tape to bond at overlap area only. Tape is not designed to bond to dielectric core.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
9907 E4XU1000	1,000 FT	24.000 LB	GRAY, LIGHT DEC		RG-58 TYPE COAX
9907 E4X1000	1,000 FT	23.000 LB	GRAY, LIGHT DEC	C	RG-58 TYPE COAX
9907 E4X1640	1,640 FT	41.000 LB	GRAY, LIGHT DEC	C	RG-58 TYPE COAX
9907 E4X2500	2,500 FT	62.500 LB	GRAY, LIGHT DEC	C	RG-58 TYPE COAX
9907 E4X3280	3,280 FT	82.000 LB	GRAY, LIGHT DEC	C	RG-58 TYPE COAX
9907 E4X500	500 FT	12.500 LB	GRAY, LIGHT DEC		RG-58 TYPE COAX

Notes:
C = CRATE REEL PUT-UP.

Computer and Instrumentation Cable

50 Ohm Ethernet® Coax

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
Thinnet 10Base2 Ethernet • 20 AWG Stranded (19x32) .037″ Conductor • Duobond® II + Overall TC Braid Shield (93% Coverage)																			
Non-plenum • Foam Polyethylene Insulation • Gray PVC Jacket																			
UL AWM Style 1354 (30V 60°C)	**9907**	NEC: CL2 CM CEC: CM	500 U-1000 1000 1640 2500 3280	152.4 U-304.8 304.8 500.0 762.0 1000.0	12.5 24.0 23.0 41.0 62.5 82.0	5.7 10.9 10.4 18.6 28.4 37.3	20 AWG (19x32) .037″ TC 8.8Ω/M′ 28.9Ω/km	.102	2.59	Duobond II* + 93% TC Braid 5.8Ω/M′ 19.0Ω/km	.185	4.70	50	80%	25.4	83.3	1 10 50 100 200 400 700 900 1000	.4 1.3 2.9 4.2 6.1 8.9 12.1 13.9 14.8	1.4 4.3 9.5 13.8 20.0 29.2 39.7 45.6 48.6
RG-58A/U Type DEC Part No. 17-01248-00															For Plenum versions see 89907 or 82907.				
Plenum • Foam FEP Insulation • Gray Fluorocopolymer Jacket																			
150°C	**89907**	NEC: CMP CL2P CEC: CMP FT6	500 1000† 2500†	152.4 304.8 762.0	11.0 22.0 60.0	5.0 10.0 27.3	20 AWG (19x32) .037″ TC 8.8Ω/M′ 28.9Ω/km	.095	2.41	Duobond II* + 93% TC Braid 5.8Ω/M′ 19.0Ω/km	.160	4.06	50	80%	25.4	83.3	1 10 50 100 200 400 700 900 1000	.4 1.3 2.9 4.2 6.1 9.2 12.9 15.0 16.0	1.4 4.3 9.5 13.7 20.0 30.2 42.3 49.2 52.5
RG-58A/U Type DEC Part No. 17-01246-00. Suitable for Outdoor applications.															For Non-plenum version see 9907.				
Plenum • FPFA Insulation • Natural Flamarrest® Jacket																			
75°C	**82907**	NEC: CMP CL2P CEC: CMP FT6	500† U-1000†† 1000† 2500†	152.4 U-304.8 304.8 762.0	11.0 23.0 22.0 57.5	5.0 10.5 10.0 26.1	20 AWG (19x32) .037″ TC 8.8Ω/M′ 28.9Ω/km	.095	2.41	Duobond II* + 93% TC Braid 5.8Ω/M′ 19.0Ω/km	.160	4.06	50	80%	25.4	83.3	1 10 50 100 200 400 700 900 1000	.4 1.3 2.9 4.2 6.1 9.2 12.9 15.0 16.0	1.4 4.3 9.5 13.7 20.0 30.2 42.3 49.2 52.5
RG-58A/U Type															For Non-plenum version see 9907.				
Thicknet 10Base5 Ethernet • 12 AWG Solid .086″ Bare Copper Conductor • Duobond IV Quad Shield (100% Coverage)																			
Non-plenum • Foam Polyethylene Insulation • Yellow PVC Jacket																			
UL AWM Style 1478 (30V 60°C)	**9880**	NEC: CL2 CM CEC: CM	500 1000 1640	152.4 304.8 500.0	66.0 131.0 219.8	30.0 59.5 99.7	12 AWG (solid) .086″ BC 1.4Ω/M′ 4.7Ω/km	.243	6.17	Duobond IV* (Duobond II + 94% TC Braid + Duofoil® + 90% TC Braid) 1.5Ω/M′ 5.0Ω/km	.405	10.29	50	78%	26.0	85.3	1 5 10 50 100 200 400 700 900 1000	.2 .4 .5 1.2 1.7 2.6 3.9 5.5 6.5 6.9	.6 1.2 1.7 3.9 5.6 8.4 12.8 18.1 21.3 22.6
DEC Part No. 17-00451-00 Ring-band stripes marked every 2.5 meters to aid users in tap placement.															For Plenum version see 89880.				
Plenum • Foam FEP Insulation • Orange Fluorocopolymer Jacket																			
150°C	**89880**	NEC: CL2P CMP CEC: CMP FT6	1000 1640†	304.8 500.0	134.0 224.7	60.9 102.1	12 AWG (solid) .086″ BC 1.4Ω/M′ 4.7Ω/km	.245	6.22	Duobond IV* (Duobond II + 90% TC Braid + Duofoil + 90% TC Braid) 1.5Ω/M′ 5.0Ω/km	.375	9.53	50	78%	26.0	85.3	1 5 10 50 100 200 400 700 900 1000	.2 .4 .5 1.2 1.7 2.5 3.8 5.6 6.8 7.2	.6 1.2 1.7 3.8 5.4 8.0 12.5 18.4 22.3 23.6
DEC Part No. 17-00324-00 Ring-band stripes marked every 2.5 meters to aid users in tap placement. Suitable for Outdoor and Direct Burial applications.																			

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

*Duobond II = Bonded Duofoil® (100% coverage) + aluminum braid (67% coverage).
Duobond IV = Bonded Duofoil (100% coverage) + aluminum braid (67% coverage) + Duofoil (100% coverage) + aluminum braid (46% coverage).
†Final put-up length may vary from length shown ±10% for spools and reels, ±5% for UnReel® cartons.
††Length may vary -0/+10%.