

**Product:** <u>1186A</u> ☑



CATV Video, RG59, 20 AWG BCCS, Quad Shield (Foil + 65% Braid + Foil + 45% Braid), CM

## **Product Description**

Series 59, 20 AWG solid .032" bare copper-covered steel conductor, gas-injected foam polyethylene insulation, Duobond® + aluminum braid(s) shield (65% and 45% coverage), PVC jacket.

# **Technical Specifications**

## **Product Overview**

	Suitable Applications:	CATV, Broadband
Physical Characteristics (Overall)		

# Physical Characteristics (Overall)

#### Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	BCCS - Bare Copper Covered Steel	0.032 in	1
Conductor Count:		1		

#### Insulation

Material	Nominal	Diameter
PE - Polyethylene (Foam)	0.144 in	
Table Notes:		Gas Injec

#### Outer Shield

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	2	Aluminum		65%
Tape	3	Tri-Laminate (Alum+Poly+Alum)	Duofoil®	100%
Braid	4	Aluminum		45%

## Outer Jacket

Material	Nominal Diameter
PVC - Polyvinyl Chloride	0.265 in

# **Electrical Characteristics**

# Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
44.5 Ohm/1000ft	7 Ohm/1000ft	7.0 Ohm/1000ft

## Capacitance

Nom. Capacitance Conductor to Shield 16.2 pF/ft

# Inductance

Nominal Inductance 0.097 µH/ft

# Impedance

Nominal Characteristic Impedance	Nominal Characteristic Tolerance
75 Ohm	± 3 Ohm

# Return Loss (RL)

Frequency [MHz]	Min. Structural Return Loss (SRL)
5 MHz	20 dB
1000 MHz	20 dB

# High Frequency (Nominal/Typical)

Nom. Insertion Loss
0.89 dB/100ft
1.95 dB/100ft
3.59 dB/100ft
4.05 dB/100ft
4.27 dB/100ft
4.64 dB/100ft
4.88 dB/100ft
5.30 dB/100ft
5.90 dB/100ft
6.96 dB/100ft
7.54 dB/100ft
8.09 dB/100ft

# Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.2 ns/ft	83%

# High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)
5 MHz	0.89 dB/100ft
55 MHz	1.95 dB/100ft
211 MHz	3.59 dB/100ft
270 MHz	4.05 dB/100ft
300 MHz	4.27 dB/100ft
350 MHz	4.64 dB/100ft
400 MHz	4.88 dB/100ft
450 MHz	5.3 dB/100ft
550 MHz	5.9 dB/100ft
750 MHz	6.96 dB/100ft
870 MHz	7.54 dB/100ft
1000 MHz	8.09 dB/100ft

# Voltage

UL Voltage Rating 300 V RMS

# **Temperature Range**

Operating Temp Range:	-40°C To +80°C

# **Mechanical Characteristics**

Bulk Cable Weight:	30 lbs/1000ft
Max. Pull Tension:	140 lbs
Min. Bend Radius/Minor Axis:	2.75 in

# **Standards**

NEC/(UL) Compliance:	CATV, CM
CEC/C(UL) Compliance:	СМ
RG Type:	59
Series Type:	59

## **Applicable Environmental and Other Programs**

Environmental Space:	Indoor (Not Riser or Plenum)
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (RoHS 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
MII Order #39 (China RoHS):	Yes

# Flammability, LS0H, Toxicity Testing

UL Flammability:	UL1685 UL Loading
UL voltage rating:	300 V RMS

#### **Part Number**

## Variants

Item #	Color	Put-Up Type	Length	UPC
1186A 0101000	Black	Reel	1,000 ft	612825107958

#### **Product Notes**

Notes:	Sweep tested 5 MHz to 1 GHz.

## History

Update and Revision:	Revision Number: 0.376 Revision Date: 12-15-2021

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