Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION



1283S5 Coax - Banana Peel® Unjacketed VideoFLEX® Bundles





Description:

20 AWG solid .032" bare copper conductors, foam FEP insulation, Duofoil® + tinned copper braid shield (95% coverage), Flamarrest® jackets in colors, center spline binder.

Usage (Overall)

Suitable Applications:

RGB, VGA, SVGA, XGA, SXGA, UXGA, HDTV, LCD, Plasma, Digital Signage, Component Video, Video Mult, Animation, Special Effects. Suitable for use in Plenum spaces

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
5	20	Solid	BC - Bare Copper	.032

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
FFEP - Foam Fluorinated Ethylene Propylene	.133

Inner Shield

Inner Shield Material:

L	ayer#	Inner Shield Trade Name T		Inner Shield Material	Coverage (%)	
1		Duofoil®	Tape	Aluminum Foil-Polyester Tape-Aluminum Foil	100	
2	!		Braid	TC - Tinned Copper	95	

Inner Jacket

Inner Jacket Material:

Inner Jacket Material	Nom. Dia. (in.)
Plenum Grade PVC - Polyvinyl Chloride	.196

Inner Jacket Color Code Chart:

Number	Color
1	Red
2	Green
3	Blue
4	White
5	Yellow

Outer Shield

Outer Shield Material:

Outer Shield	Material
Unshielded	

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
Unjacketed

Overall Cabling

Overall Cabling Fillers:

Bonded Spline

Detailed Specifications & Technical Data





1283S5 Coax - Banana Peel® Unjacketed VideoFLEX® Bundles

Overall Nominal Diameter: 0.529 in.

Mechanical Characteristics (Overall)									
Operating Temperature Range:	-20°C To +75°C								
UL Temperature Rating:	60°C								
Non-UL Temperature Rating:	75°C								
Bulk Cable Weight:	161 lbs/1000 ft.								
Max. Recommended Pulling Tension:	216 lbs.								
Min. Bend Radius (Install)/Minor Axis:	6.500 in.								

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
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):	06/01/2005
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:	59/U
Flame Test	
UL Flame Test:	NFPA 262
Suitability	
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Plenum/Non-Plenum	
Plenum (Y/N):	Yes

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Impedance (Ohm) 75

Nom. Inductance:

Inductance (µH/ft)

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.2

Nominal Velocity of Propagation:

VP (%) 83

Nominal Delay:

Delay (ns/ft) 1.22

Nom. Conductor DC Resistance:

Detailed Specifications & Technical Data





1283S5 Coax - Banana Peel® Unjacketed VideoFLEX® Bundles

DCR @ 20°C (Ohm/1000 ft) 10.0

Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft) 3.8

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1	0.3
3.6	0.6
10	0.9
71.5	2.1
135	2.7
270	3.8
360	4.4
540	5.5
720	6.4
750	6.5
1000	7.6
1500	9.4
2500	12.4
3000	13.8

Max. Operating Voltage - UL:

Voltage 300 V RMS

Other Electrical Characteristic 1: Impedance tested in accordance with ASTM D-4566 paragraph 43.2, option 2

using a 75 Ohm fixed bridge and termination.

Other Electrical Characteristic 2: Return Loss Tested in Accordance With ASTM D-4566 Paragraph 45.3, Using

a 75 Ohm Fixed Bridge and Termination.

Minimum Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. RL (dB)
5	850	23
851	3000	15

Sweep Test

Sweep Testing: Sweep tested 5 MHz to 3 GHz.

Put Ups and Colors:

Item # Putup		Ship Weight	Color	Notes	Item Desc
1283S5 0001000	1,000 FT	171.000 LB	NONE	С	5C20 RGBSC
1283S5 000500	500 FT	88.000 LB	NONE	С	5C20 RGBSC

Notes:

C = CRATE REEL PUT-UP.

Introduction

Compare Belden® Coaxial cables and the companies who produce them and you will discover the obvious: Belden has no equal. That's because Belden Coaxial cables are time-tested for performance. Performance that guarantees outstanding value. Belden guarantees this level of performance because every cable is tested with equipment that simulates every known environmental and electrical performance condition. As a result, Belden Coaxial cable can be counted on for positive, reliable and trouble-free operation.

Belden Coaxial cables are engineered in a wide selection of sizes and materials, with each offering the benefits needed for physical, electrical and cost-requirement applications. Cable choices include broadband, standard analog, precision video for analog and digital, bundled RGB, high-flex S-Video, video triax, conformable coax and more.

Most of our Coax cables are available from stock. Many of these are available off the shelf from distributors. If you have a new or unusual application or you cannot find a Coax cable in this catalog section that meets your technical requirements, contact Technical Support at 1-800-BELDEN-1.

Coax Cable Shielding

Belden's line of coaxial cable features a wide range of shielding configurations. Among the options are:

Duofoil®

Duofoil is a shield in which metallic foil is applied to both sides of a supporting polyester or polypropylene film.

Duobond®

Duobond is essentially the same construction as Duofoil (a laminated shielding tape consisting of aluminum foil/plastic film/ aluminum foil), but with an extra layer of heat-sensitive adhesive bonding the foil shield to the dielectric core. This foil shield provides 100% coverage and insures maximum shield protection.

Duobond II (Foil/Braid)

Combines all the features of Duobond with an outer braid applied for greater protection against interference and to increase the overall tensile strength.

Duobond III (Tri-Shield)

Duobond III utilizes the Duobond II design (foil/braid) plus an additional surrounding layer of Duofoil. This extra layer of foil improves shield reliability and provides an additional interference barrier.

Duobond IV (Quad Shield)

Duobond IV adds a second layer of braid to the Tri-Shield design (foil/braid/foil/braid). This extra layer of braid shield provides improved strength and durability.

Duobond Plus®

Features the same foil/braid/foil construction as Duobond II but with the addition of a shorting fold in the outermost foil. This fold prevents a slot opening from being created in the shield, thereby preventing signal egress or ingress. This unique feature creates the effect of a solid metal conduit, which improves the high-frequency performance of the cable. (See the Technical Information section of this catalog for a more detailed explanation of "shorting folds.")

Coax Cable Packaging

As with most Belden cables, several Coax cable products are available in Belden's UnReel® cardboard dispenser. The UnReel is a unique packaging dispensing system developed by Belden to save time, cut costs and labor, and eliminate the need for dereeling equipment. Lightweight and more economical than conventional drums or reels, UnReel dispensers have pre-punched handles for easy, individual transport as well as rectangular boxes for easy pallet delivery and storage. UnReel cable pays out smoothly and evenly with no kinking, twisting, or backlashing. It also rolls out 60% faster than conventionally packaged cable.

Corresponding Literature

Technical Bulletins

TB-65: Digital Studio Cable Guide



6 • Coaxial Cables

RG Coaxial and Triaxial Reference Guide

Bundled and S-Video Coax

Cable Designation	Part No.	No. of Coax	Page No.	Spec. Reference	Conductor Stranding/ Dia. & Type* (DCR/1000 Ft.)	Insulation Material (OD in.)	Shield Type Tape/Braid (DCR/1000 Ft.)	Jacket Material (OD in.)	Nom. Weight (Lbs./Ft.)	Nom. Imp. (Ω)	Nom. Cap. (pF/Ft.)	Suggested Operating Temp. Range (°C) UL	Max. Oper. Voltage (RMS) Non UL
Bundled Coa	x (con	itinued)											
RG-6 Type Bundled SDI Coax	7710A	3	6.46	Belden	1/.040" BC (6.4)	GIFPE (.180)	DF/95% TC (3.0)	PVC-M (.770)	.234	75	16.2	-40 to +75	300
RG-6 Type Bundled SDI Coax	7711A	4	6.46	Belden	1/.040" BC (6.4)	GIFPE (.180)	DF/95% TC (3.0)	PVC-M (.900)	.303	75	16.2	-40 to +75	300
RG-6 Type Bundled SDI Coax	7712A	5	6.46	Belden	1/.040" BC (6.4)	GIFPE (.180)	DF/95% TC (3.0)	PVC-M (.970)	.371	75	16.2	-40 to +75	300
RG-6 Type Bundled SDI Coax	7713A	10	6.46	Belden	1/.040" BC (6.4)	GIFPE (.180)	DF/95% TC (3.0)	PVC-M (1.386)	.772	75	16.2	-40 to +75	300
RG-59/U Type Bundled (Miniature)	7787A	3	6.45	Belden	1/.023" BC (20.1)	GIFHDPE (.102)	DF/95% TC (7.6)	PVC (.432)	.081	75	16.5	-35 to +75	300
RG-59/U Type Bundled (Miniature)	7788A	4	6.45	Belden	1/.023" BC (20.1)	GIFHDPE (.102)	DF/95% TC (7.6)	PVC (.481)	.106	75	16.5	-35 to +75	300
RG-59/U Type Bundled (Miniature)	7789A	5	6.45	Belden	1/.023" BC (20.1)	GIFHDPE (.102)	DF/95% TC (7.6)	PVC (.539)	.133	75	16.5	-35 to +75	300
RG-59/U Type Bundled (Miniature)	7790A	6	6.45	Belden	1/.023" BC (20.1)	GIFHDPE (.102)	DF/95% TC (7.6)	PVC (.597)	.163	75	16.5	-35 to +75	300
RG-59/U Type Bundled (Miniature)	7791A	12	6.45	Belden	1/.023" BC (20.1)	GIFHDPE (.102)	DF/95% TC (7.6)	PVC (.796)	.280	75	16.5	-35 to +75	300
RG-59/U Type Bundled (Miniature)	7792A	12	6.45	Belden	1/.023" BC (20.1)	GIFHDPE (.102)	DF/95% TC (7.6)	PVC (.825)	.336	75	16.5	-35 to +75	300
RG-59/U Type Bundled	7794A	3	6.45	Belden	1/.032" BC (10.0)	GIFHDPE (.145)	DF/95% TC (3.8)	PVC (.631)	.084	75	16.3	-35 to +75	300
RG-59/U Type Bundled	7795A	4	6.45	Belden	1/.032" BC (10.0)	GIFHDPE (.145)	DF/95% TC (3.8)	PVC (.706)	.190	75	16.3	-35 to +75	300
RG-59/U Type Bundled	7796A	5	6.45	Belden	1/.032" BC (10.0)	GIFHDPE (.145)	DF/95% TC (3.8)	PVC (.790)	.238	75	16.3	-35 to +75	300
RG-59/U Type Bundled	7798A	10	6.45	Belden	1/.032" BC (10.0)	GIFHDPE (.145)	DF/95% TC (3.8)	PVC (1.166)	.501	75	16.3	-35 to +75	300
RG-59/U Type Bundled RGB Coax BananaPeel Plenum	128383	3	6.46	Belden	1/.032" TC (10.0)	FFEP (.133)	DF/95% TC (3.8)	PVC (.422)	.103	75	16.2	-20 to +75	300
RG-59/U Type Bundled RGB Coax BananaPeel Plenum	128385	5 5	6.46	Belden	1/.032" TC (10.0)	FFEP (.133)	DF/95% TC (3.8)	PVC (.529)	.174	75	16.2	-20 to +75	300
RG-59/U Type Bundled RGB Coax BananaPeel Plenum	128386	6	6.46	Belden	1/.032" TC (10.0)	FFEP (.133)	DF/95% TC (3.8)	PVC (.588)	.209	75	16.2	-20 to +75	300
S-Video Coa	x												
Parallel Coax S-Video Plenum	7700A	2	6.50	Belden	7/.012" TC (100.0)	FFEP (.053)	None/98% TC (7.5)	FLM (.107 x .214)	.017	75	17.3	-20 to +60	300
Parallel Coax S-Video High-Flex	1807A	2	6.50	Belden	7/.012" TC (100.0)	FHDPE (.056)	None/90% TC (7.5)	PVC (.110 x .230)	.013	75	17.3	-40 to +75	300
Round S-Video High-Flex Design	1808A	2	6.50	Belden	7/.012" TC (100.0)	FHDPE (.056)	None/90% TC (7.5)	PVC (.255)	.031	75	17.3	-40 to +75	300

^{*}Inner conductors are entered as: number of strands/strand diameter (in inches).

Conductor Abbreviations

BC = Bare Copper BCCA = Bare Copper-covered Aluminum CCS = Copper-clad Steel SC = Silver-coated Copper SCA = Silver-coated Alloy
SCCS = Silver-coated Copper-covered Steel SPC = Silver-plated Copper SPCCS = Silver-plated Copper-covered Steel TC = Tinned Copper

Braid Abbreviations AL = Aluminum

BC = Bare Copper CT = Copper-Tin Composite SC = Silver-coated Copper SPC = Silver-plated Copper TC = Tinned Copper

Tape Abbreviations

BB = Bonded Beldfoil® BF = Beldfoil DB = Duobond® DBII = Duobond II DBIII = Duobond III DBIV = Duobond IV DB+ = Duobond Plus® DF = Duofoil® F = Foil

Insulation Abbreviations

FEP = Fluorinated Ethylene Propylene FFEP = Foam FEP FHDPE = Foam High-Density Polyethylene FPE = Foam Polyethylene FRSFPE = Flame-retardant Semi-foam Polyethylene GIFHDPE = Gas-injected Foam High-Density Polyethylene GIFPE = Gas-injected Foam Polyethylene GIFFE = Gas-injected Foatil Polye
PE = Solid Polyethylene
PP = Solid Polypropylene
SSFEP = Semi-solid FEP
SSPE = Semi-solid Polyethylene
TFE = Tetrafluoroethylene

Jacket Abbreviations

BELFX = Belflex® FCP = Fluorocopolymer FEP = Fluorinated Ethylene Propylene FG = Fiberglass FLM = Flamarrest® H = Hypalon®
HDPE = High-density Polyethylene
LSZH = Low-Smoke, Zero-Halogen
PE = Polyethylene
PVC = Polyvinyl Chloride PVC-M = Matte finish Polyvinyl Chloride PVC-NC = Non-contaminating Polyvinyl Chloride TFE-T = Tetrafluoroethylene Tape Wrap

Hypalon is a DuPont trademark.



Brilliance VideoFLEX® Snake Cable for Precision Analog and Digital Video





Description	Part	UL NEC/	No.	Standard Lengths		Standard Unit Weight		Conductor (stranding)	Nominal Core OD		Shielding	Nominal OD		Nom.	Nom. Vel.	Nominal Capacitance		Nominal Attenuation MHz dB/ dB/ 100 Ft. 100m		
Description F	No.	Type	Cond.	Ft.	m	Lbs.	kg	Diameter Nom. DCR	Inch	mm	Nom. DCR	Inch	mm	(Ω)	of Prop.	pF/Ft.	pF/m	MHz 1	dB/ 100 Ft.	dB/ 100m
RG-59/U • 20 AWG Solid .032" Bare Copper Conductors • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)																				

Plenum •	Foam F	EP Ins	ulation	• Plenum-	Grade	PVC	Jackets	(Color	Code	: See char	t below) • Ce	nter	Spline •	No O	verall	Jac	ket
300V RMS	1283\$3 (TEW)	NEC: CMP CEC: CMP	3 1	250 76.2 500 152.4 000 304.8	54.0	11.9 24.5 46.7	20 AWG (solid) .032" BC 10.0Ω/M' 32.8Ω/km	.133	3.38	Duofoil (95%) + TC Braid 3.8Ω/M' 12.5Ω/km	.422	10.72	75	83% 16.2		1 3.6 10 71.5 135 270 360 540 720	.3 .6 .9 2.1 2.7 3.8 4.4 5.5 6.4	1.0 2.0 2.9 6.9 8.9 12.5 14.4 18.0 21.0
	1283\$5 (TEW)	NEC: CMP CEC: CMP	5 1	250 76.2 500 152.4 000 304.8	88.0	19.7 39.9 78.9	same as above	.133	3.38	same as above	.529	13.44			2	750 1000 1500 2500	6.5 7.6 9.4 12.4	21.3 24.9 30.8 40.7
	1283S6 (TEV)	NEC: CMP CEC: CMP	6	250 76.6 500 152.4 000 304.8	108.0	26.8 49.0 94.8	same as above	.133	3.38	same as above	.588	14.94		Sweep tes	ted. 5 MI		13.8 GHz.	45.3

Suitable for Indoor and Outdoor applications.

RG-6/U Type • 18 AWG Solid .040" Bare Copper Conductors • Duofoil® (100% Coverage) + Tinned Copper Braid Shield (95% Coverage)

Gas-injec	ted F	oam HD	PE I	Insulat	ion • (Overa	all Ma	atte Blac	k PV	C Ja	cket (Co	lor Co	de: Se	e cha	art be	low)				
SDI/HDTV Digital Video 75°C (1694A Bundled	7710A	NEC: CMR CEC: CMG FT4	3	500 1000	152.4 304.8	137.5 285.0	62.4 129.3	18 AWG (solid) .040" BC 6.4Ω/M' 21.0Ω/km	.180 Coa: .275	4.57 × OD: 6.99	Duofoil + 95% TC Braid 3.0Ω/M′ 9.8Ω/km	.770	19.56	75	82%	16.2	53.1	1 3.6 10 71.5 135 270 360 540 720	.2 .5 .7 1.6 2.1 3.0 3.4 4.3 4.9	.8 1.5 2.4 5.2 6.9 9.7 11.3 13.9 16.1
	7711A	NEC: CMR CEC: CMG FT4	4	500 1000		179.5 350.0	81.4 158.8	same as above	.180 Coar .275	4.57 × OD: 6.99	same as above	.900	22.86					750 1000 1500 2500 3000	5.0 5.9 7.3 9.1 10.6	16.4 19.3 24.0 31.8 35.0
	7712A	NEC: CMR CEC: CMG FT4	5	500 1000		216.5 454.0	98.2 205.9	same as above	.180 Coar .275	4.57 × OD: 6.99	same as above	.970	24.64							
	7713A		10	500 1000	152.4 304.8	463.0 904.0	210.0 410.4	same as above	.180 Coax .275	4.57 × OD: 6.99	same as above	1.386	35.20		Sweep tested 5 MHz to 3 GHz.				GHz.	

BC = Bare Copper • DCR = DC Resistance • FEP = Fluorinated Ethylene Propylene • HDPE = High-density Polyethylene • TC = Tinned Copper

Color Code Chart

Cond.	Color	Cond.	Color
1	Red	6	Brown
2	Green	7	Orange
3	Blue	8	Gray
4	White	9	Purple
5	Yellow	10	Black

