

Amphenol

Cable

G180 1.27mm Economical Flat Ribbon Cable

Materials

Pitch	– 1.27mm
Conductor	– 28AWG (7/36 strand) Tinned Copper
Laminate	– Clear PVC 94V-0
Temperature	– 80°C

Electrical

Current	– 1A
Voltage	– 300V

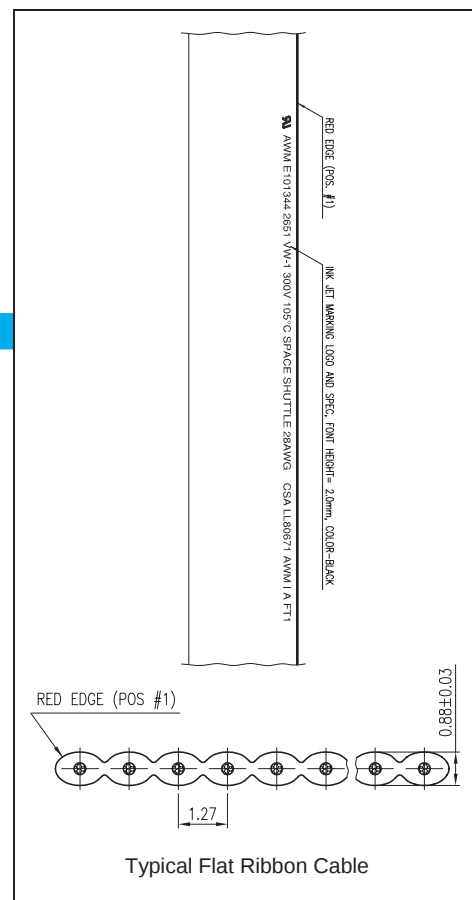
Features

Allows for mass termination
Up to 64 conductors

Part Number System:

G180 X X XX X	
FLAT RIBBON CABLE 1.27mm Pitch	VARIATION CODE Blank: Standard
PACAGING LENGTH 1: 500 Feet 2: 400 Feet 3: 250 Feet 4: 200 Feet	NUMBER OF CONDUCTORS 09: 9 Position 14: 14 Position 15: 15 Position 16: 16 Position 20: 20 Position 24: 24 Position 25: 25 Position 26: 26 Position 34: 34 Position 36: 36 Position 37: 37 Position 40: 40 Position 50: 50 Position 60: 60 Position 64: 64 Position
WIRE SIZE 1: 26 AWG 2: 28 AWG 3: 30 AWG	

PNS-1800 Rev. A



AMTA

3C® 1.27mm Colour Coded Grade A Ribbon Cable

Ideal for digital and analog signal applications. Designed for mass termination, the colour coding allows for easy circuit tracing and routing.

Materials

Pitch	– 1.27mm
Reel Length	– 100 ft
Conductor	– 28AWG (7/36 strand) Tinned Copper
Laminate	– Clear PVC 94V-0
Temperature	– 80°C

Electrical

Current	– 1A
Voltage	– 300V

Impedance	– 105Ω
Capacitance	– 13 pF/ft nom.
Crosstalk (10' sample, 5ns rise time)	– NE= 4.1%, FE = 4.3%
Propagation delay	– 1.5ns/ft nom.

Features

Allows for mass termination
Up to 64 conductors
Highly flexible colour coded
UL and CSA certified

SPECTRA-STRIP

Alternate Colour Coded Stranded Core Cables		
Pitch (mm)	Wire Gauge (AWG)	Part Number System:
1.27	26	843-135-2610-0XX
2.16	26	843-135-2601-0XX
2.16	24	843-135-2401-0XX
2.54	26	843-135-2602-0XX
2.54	24	843-135-2402-0XX
3.18	26	843-135-2603-0XX
3.96	26	843-135-2604-0XX
3.96	24	843-135-2403-0XX
3.96	22	843-135-2201-0XX

For High Flex Life Ribbon Cable use
Spectra-Flex™ Series 191-2811
1.27mm pitch 28AWG Gray only
Part Number System: 843-191-2811-0XX

For Halogen-free Ribbon Cable use Series
193-2829 Gray only
Part Number System: 193-2829-0X

Part Number:	No. of Conductors	Dimensions	
		A	B
843-135-2801-010	10	12.83	11.43
843-135-2801-014	14	17.91	16.51
843-135-2801-016	16	20.45	19.05
843-135-2801-020	20	25.53	24.13
843-135-2801-024	24	30.61	29.21
843-135-2801-025	25	31.88	30.48
843-135-2801-026	26	33.15	31.75
843-135-2801-034	34	43.31	41.91
843-135-2801-036	36	45.85	44.45
843-135-2801-037	37	47.12	45.72
843-135-2801-040	40	50.93	49.53
843-135-2801-050	50	63.63	62.23
843-135-2801-060	60	76.33	74.93
843-135-2801-064	64	81.41	80.01

SS

Twist 'n' Flat® Twisted Pair Ribbon Cable

Combines the time and cost savings of mass termination with the electrical performance of twisted pairs.

425-3006 Series

Loose Pair Ribbon Cable

Materials

Pitch	– 0.635mm
Reel Length	– 250 ft
Conductor	– 30AWG (7/38 strand) tinned Copper
Insulation	– PVC
Laminate	– Polyester
Temperature	– 80°C
Twisted Length	– ± 88.9mm
Flat Length	– ± 44.5mm

Electrical

Current	– 0.75A
Voltage	– 150V
Impedance	– 110Ω ¹ 95Ω ² 120Ω ³
Capacitance	– 13pf/ft ¹ 18pf/ft ² 13pf/ft ³
Attenuation 5MHz	– 4dB/100'
10MHz	– 5dB/100'
Propagation delay	– 1.5ns/ft
DC Resistance	– 106Ω/1000'

¹ Measured Single-Ended

² Measured Singled-Ended with one conductor of each pair commoned to one Bus (SCSI mode)

³ Measured Differentially

Features

Loose pair configuration allows for air flow
Double sided lamination acts as strain relief

125-3001 Series

Solid Core Ribbon Cable

Materials

Pitch	– 0.635mm
Reel Length	– 250 ft
Conductor	– 30AWG (solid) tinned Copper
Insulation	– PVC
Laminate	– Polyester
Temperature	– 80°C
Twisted Length	– ± 88.9mm
Flat Length	– ± 44.5mm

Electrical

Current	– 0.75A
Voltage	– 150V
Impedance	– 90Ω ¹ 115Ω ²
Capacitance	– 19.2pf/ft @ 1MHz ¹ – 14.8pf/ft @ 1MHz ²
Propagation delay	– 1.5ns/ft
DC Resistance	– 106Ω/1000'
Delay Skew	– 0.035ns/ft max.

¹ Measured Single-Ended

² Measured Differentially

Features

UL/CSA certified
Recommended for LVD SCSI high frequency
Significant crosstalk isolation
Fully laminated for tighter impedance control

125-3007 Series

Stranded Core Planar Cable

Materials

Pitch	– 0.635mm
Reel Length	– 250 ft
Conductor	– 30AWG (7/38 strand) tinned Copper
Insulation	– PVC
Laminate	– Polyester
Temperature	– 80°C
Twisted Length	– ± 88.9mm
Flat Length	– ± 44.5mm

Electrical

Current	– 0.75A
Voltage	– 150V
Impedance	– 80Ω ¹ 110Ω ²
Capacitance	– 20.3pf/ft @ 1MHz ¹ – 15.9pf/ft @ 1MHz ²
Propagation delay	– 1.5ns/ft
DC Resistance	– 95Ω/1000'
Delay Skew	– 0.035ns/ft max.

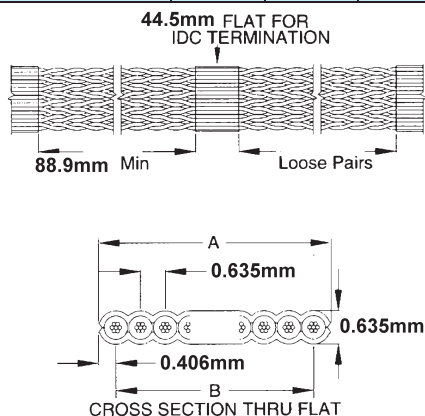
¹ Measured Single-Ended

² Measured Differentially

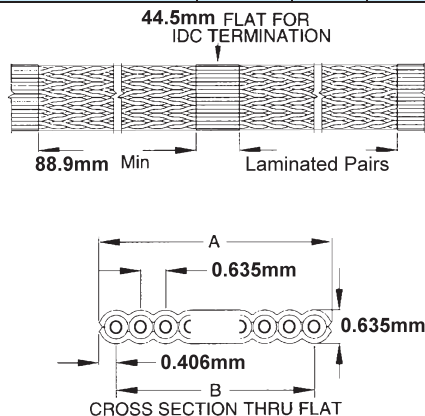
Features

UL/CSA certified
Recommended for LVD SCSI high frequency
Significant crosstalk isolation
Fully laminated for tighter impedance control

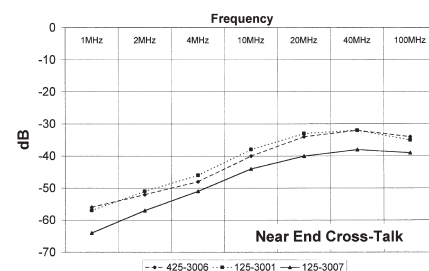
Part Number:	No. of Pairs	Dimensions		Part Number:	No. of Pairs	Dimensions		Part Numbers:	No. of Pairs	Dimensions	
		A	B			A	B			A	B
425-3006-010	5	6.53	5.72	125-3001-010	5	6.53	5.72	125-3007-010	5	6.53	5.72
425-3006-014	7	9.07	8.26	125-3001-014	7	9.07	8.26	125-3007-014	7	9.07	8.26
425-3006-016	8	10.34	9.53	125-3001-016	8	10.34	9.53	125-3007-016	8	10.34	9.53
425-3006-020	10	12.88	12.07	125-3001-020	10	12.88	12.07	125-3007-020	10	12.88	12.07
425-3006-026	13	16.69	15.88	125-3001-026	13	16.69	15.88	125-3007-026	13	16.69	15.88
425-3006-034	17	21.77	20.96	125-3001-034	17	21.77	20.96	125-3007-034	17	21.77	20.96
425-3006-036	18	23.04	22.23	125-3001-036	18	23.04	22.23	125-3007-036	18	23.04	22.23
425-3006-040	20	25.58	24.77	125-3001-040	20	25.58	24.77	125-3007-040	20	25.58	24.77
425-3006-050	25	31.93	31.12	125-3001-050	25	31.93	31.12	125-3007-050	25	31.93	31.12
425-3006-060	30	38.28	37.47	125-3001-060	30	38.28	37.47	125-3007-060	30	38.28	37.47
425-3006-064	32	40.82	40.01	125-3001-064	32	40.82	40.01	125-3007-064	32	40.82	40.01
425-3006-068	34	43.36	42.55	125-3001-068	34	43.36	42.55	125-3007-068	34	43.36	42.55
425-3006-080	40	50.98	50.17	125-3001-080	40	50.98	50.17	125-3007-080	40	50.98	50.17
425-3006-100	50	63.68	62.87	125-3001-100	50	63.68	62.87	125-3007-100	50	63.68	62.87



Typical 425-3006 Loose Pair Stranded Core TnF Planar Cable



Typical 125-3001 Laminated Pair Solid Core Planar Cable (figure shown above)
Type 125-3007, same as 125-3001 shown above except with stranded cores (7/38AWG)



Twist 'n' Flat® 1.27mm Twisted Pair Ribbon Cable

Combines the time and cost savings of mass termination with the electrical performance of twisted pairs.

132 Series Ribbon Cable

Materials

Pitch	– 1.27mm
Reel Length	– 100 ft
Conductor	– 28AWG (7/36 strand) Tinned Copper
Insulation	– PVC
Laminate	– Clear PVC
Temperature	– 80°C
Twisted Length	– ± 457.2mm
Flat Length	– ± 50.8mm

Electrical

Current	– 1A
Voltage	– 300V
Impedance	– 100Ω
Capacitance	– 15 pf/ft nom.
Crosstalk (10' sample, 5ns rise time)	
Unbalanced	– NE= 4%, FE = 3.5%
Balanced	– NE = .7%, FE = .45%
Propagation delay	– 1.6ns/ft nom.

Features

Allows for mass termination
Up to 32 pairs (64 conductors)
Highly flexible colour coded

152 Series Shielded Cable

Materials

Pitch	– 1.27mm
Reel Length	– 100 ft
Conductor	– 28AWG (7/36 strand) Tinned Copper
Insulation	– PVC
Shield	– Aluminum/Poly
Drain wire	– 28AWG (7/38 strand) Tinned Copper
Jacket	– Extruded black PVC
Laminate	– Clear PVC
Temperature	– 80°C
Twisted Length	– ± 457.2mm
Flat Length	– ± 50.8mm

Electrical

Current	– 1A
Voltage	– 300V
Impedance	– 75Ω
Capacitance	– 22 pf/ft nom at 1MHz
Crosstalk (10' sample, 5ns rise time)	
Unbalanced	– NE= 4%, FE = 3.5%
Balanced	– NE = .7%, FE = .45%
Propagation delay	– 1.6ns/ft nom.

Features

EMI/RFI Shielded
Highly flexible colour coded

159 Series Round Cable

Materials

Pitch	– 1.27mm
Reel Length	– 100 ft
Conductor	– 28AWG (7/36 strand) Tinned Copper
Insulation	– PVC
Shield	– Aluminum/Poly Foil – with 85% covered Tinned Copper braid
Jacket	– Black PVC
Laminate	– Clear PVC
Temperature	– -20°C to 105°C
Twisted Length	– ± 444.5mm
Flat Length	– ± 63.5mm

Electrical

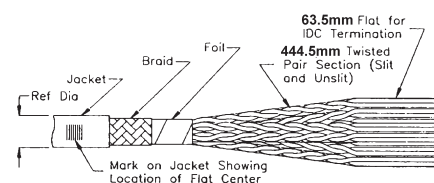
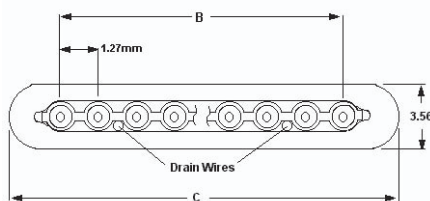
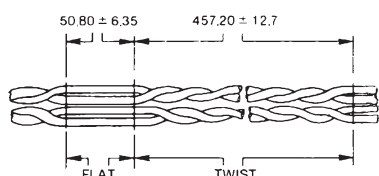
Current	– 1A
Voltage	– 300V
Impedance	– 70Ω
Capacitance	– 25 pf/ft nom at 1MHz
Crosstalk (10' sample, 5ns rise time)	
Balanced	– NE = 2.3%, FE = 1.3%
Propagation delay	– 1.65ns/ft nom.

Features

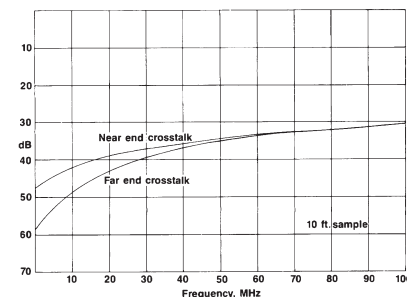
Up to 32 pairs (64 conductors)
Highly flexible colour coded
Meets FFC regulations

Part Number:	No. of Pairs	Dimensions		Part Number:	No. of Pairs	Dimensions		Part Numbers:	No. of Pairs	Dimensions
		A	B			C	B			Outer Ø
843-132-2801-010	5	13.36	11.43	843-152-2831-010	5	14.99	11.43	843-159-2832-010	5	7.62
843-132-2801-014	7	18.44	16.51	843-152-2831-014	7	20.01	16.51	843-159-2832-014	7	8.38
843-132-2801-016	8	20.98	19.05	843-152-2831-016	8	22.61	19.05	843-159-2832-016	8	8.64
843-132-2801-020	10	26.06	24.13	843-152-2831-020	10	27.69	24.13	843-159-2832-020	10	9.65
843-132-2801-026	13	33.68	31.75	843-152-2831-026	13	35.31	31.75	843-159-2832-026	13	10.41
843-132-2801-034	17	43.84	41.91	843-152-2831-034	17	45.47	41.91	843-159-2832-034	17	11.43
843-132-2801-036	18	46.38	44.45	843-152-2831-040	20	53.09	49.53	843-159-2832-040	20	12.19
843-132-2801-040	20	51.46	49.53	843-152-2831-050	25	65.79	62.23	843-159-2832-050	25	13.46
843-132-2801-050	25	64.16	62.23	843-152-2831-060	30	78.49	74.93	843-159-2832-060	30	14.48
843-132-2801-060	30	76.86	74.93					843-159-2832-064	32	14.73
843-132-2801-064	32	81.94	80.01							

Twist 'N' Flat configuration the same as 132 Series



balanced crosstalk



Alternate Twist N Flat Round Cable

No Braid, Shielded 843-159-2832-1XX
No Braid, No Shield 843-159-2832-2XX
Loose Pair Shielded 169-2832-0XX*

Halogen-free Loose Pair Shielded 168-2829-0XX*
–65–150°C Halogen-free 168-2832-0XX*

Alternate Twist N Flat Cable

Halogen-free (Flame Retardant) 132-2829-0XX
–65–150°C Halogen-free 132-2821-0XX
Halogen-free Loose Pair 468-2829-0XX*

Alternate Jacketed Twist N Flat Cable

No Shield, No Drain 843-152-2811-0XX
Copper Mesh Shield 843-152-2821-0XX

65 Series Skewclear® Cable for LVDS Channel Link™

SPECTRA-STRIP

Available in in 4 different gauges, this cable was designed to provide GREATER BANDWIDTH for Channel Link Low Voltage Differential Signalling (LVDS). These parallel pair conductors are available in 30; 28; 26 and 24AWG. This enables GIGABIT interconnections in telecommunication and data communication applications.

Materials

Length Supplied	– No Standard Length
Signal wires	– Solid silver plated copper
Drain wire	– Solid tinned copper
Insulation	– Polyolefin
Pair Shield	– Aluminum/Polyester
Laminate	– Clear PVC
Overall Shield	– Aluminized polyester
Overall Shield	– Braid tinned copper
Jacket	– Black PVC

Features

Up to 50 Pairs
High cross-talk isolation
Consistent Skew Control
Stable Impedance

Electrical

Impedance	– 100Ω ±5 Ω
Capacitance	– 30AWG 28/26/24AWG 51 pF/M 43 pF/M nom
Skew (within pair)	– 98.4ps/10M
Skew	– 350 ps/10M
Crosstalk	– 60dB min 1MHz to 1GHz
Attenuation 30AWG	– 5.4dB/10M @ 140MHz
	– 12.5dB/10M @ 693MHz
28AWG	– 4.1dB/10M @ 140MHz
	– 9.4dB/10M @ 693MHz
26AWG	– 3.3dB/10M @ 140MHz
	– 7.6dB/10M @ 693MHz
24AWG	– 2.6dB/10M @ 140MHz
	– 6.1dB/10M @ 693MHz

Applications

Flat Panel Displays
Monitor Links
SCI Processor Interconnection
Printer Engine Links
Digital Copiers
System Clusters
Multimedia Peripheral Links
Switches
Add/Drop Multiplexers
Hubs
Box to Box, Rack to Rack

Part Number System:

165-XXXX-XXX

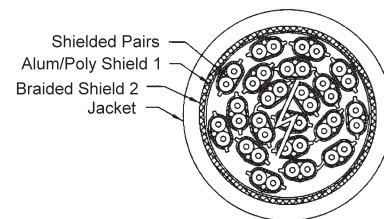
WIRE GAUGE

3099: 30AWG
2899: 28AWG
2699: 26AWG
2499: 24AWG

CONDUCTOR CODE

see table below

No of pairs	4	5	8	9	10	15	20	25	30	35	40	50
30	Code 938	939	940	941	942	943	944	945	946	947	948	949
AWG	OD 5.5	5.8	7.0	7.2	7.4	8.8	9.8	11.0	12.1	12.8	13.6	14.9
28	Code 941	942	943	944	945	946	947	948	949	950	951	952
AWG	OD 5.5	6.0	7.0	7.2	7.6	8.9	9.9	11.1	12.2	12.9	13.7	15.0
26	Code 958	959	960	961	962	963	964	965	966	967	968	969
AWG	OD 6.4	6.9	8.1	8.5	8.9	10.7	12.2	11.0	14.5	15.5	16.3	18.0
24	Code 969	970	971	972	973	974	975	976	977	978	979	980
AWG	OD 7.4	8.0	9.7	10.0	10.8	13.0	14.6	16.0	16.5	18.5	20.2	22.2



121 Series Spectr-Coax™ Coax Planar Cable

SPECTRA-STRIP

Coax planar cable with high speed signal capability that can be mass terminated. It is available in 93; 75 and 50 Ohms

Materials

Pitch	– 2.54mm
Reel Length	– 100 ft
Centre Conductor	93 & 75Ω – 30AWG copper
	50Ω – 28AWG copper

Dielectric

93 & 75Ω	– Foamed Polypropylene
50Ω	– Solid Polypropylene

Drain wire

	– 28AWG tinned copper
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Shield

	– Aluminum Poly Foil
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Jacket

93Ω	– Red PVC
75Ω	– Gray PVC
50Ω	– Black PVC

Features

High Signal Speed
Controlled Impedance
Up to 33 Conductors
Mass Termination

Electrical

Impedance	– 93Ω ± 5Ω
	– 75Ω ± 4Ω
	– 50Ω ± 3Ω
Capacitance 93Ω	– 14 ± 2pF/ft
75Ω	– 17.1 ± 1pF/ft
50Ω	– 31 ± 2pF/ft
Crosstalk	– <1% NE and FE
	unbalanced, 10 foot cable
	Rise time 3.5 or 7 nanosec

Propagation delay

93 & 75Ω	– 1.35 nanosec/ft
50 Ω	– 1.54 nanosec/ft

Propagation velocity

93 & 75Ω	– 78%
50 Ω	– 66%

Risetime degradation

93 & 75Ω	– <350 picosec/10ft
50Ω	– <400 picosec/10ft

Attenuation /100ft. nom. 100MHz

93Ω	– 6dB
75Ω	– 7.3dB
50Ω	– 11dB

Part Number System:

843-121-XXXX-0XX

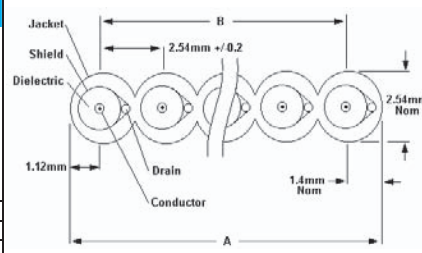
CABLE TYPE

3001: 93Ω
3002: 75Ω
2803: 50Ω

CONDUCTOR CODE

02: 2 Position
:
33: 33 Position (see table)

Conductor	2	3	4	5	6	7	8	9	10	13	17	20	25	30	33
Dim A	5.1	7.6	10.1	12.7	15.2	17.8	20.3	22.9	25.4	33.0	43.2	50.8	63.5	76.2	83.8
Dim B	2.5	5.1	7.6	10.1	12.7	15.2	17.8	20.3	22.9	30.5	40.6	48.3	61.0	73.7	81.3



Specialised Flat Ribbon Cable

Qwik Strip® 133-2803

Ground Plane Ribbon Cable

Materials

Pitch	– 1.27mm
Reel Length	– 100 ft
Conductor	– 28AWG (7/36 strand) tinned Copper
Ground Plane	– Copper Mesh
Laminate	– Gray PVC 94V-0
Temperature	– 105°C

Electrical

Current	– 1A
Voltage	– 300V
Impedance	– 65Ω ¹
Capacitance	– 29pf/ft ¹
Propagation delay	– 1.65ns/ft
Crosstalk (10' sample, 5ns rise time)	
NE	– 1.2%
FE	– 3.5%

¹ Measured from Conductor to Ground

Features

Easy cable preparation
Cost saving termination labour
Cosistant peel back
Controlled crosstalk and EMI/RFI
UL and CSA certified

Shielded 151 Series

Jacketed Ribbon Cable

Materials

Pitch	– 0.635mm
Reel Length	– 100 ft
Conductor	– 30AWG (solid) tinned Copper
Insulation	– Gray PVC
Shield	– Aluminum/Poly tinned Copper
Drain Wire	– 30AWG (solid) tinned Copper

Jacket	– Black PVC
Temperature	– -20~105°C

Electrical

Current	– 0.8A
Voltage	– 150V
Impedance	– 55Ω ¹
Capacitance	– 30pf/ft @ 1MHz ¹
Inductance	– 12μh/ft @ 1MHz ¹
Propagation delay	– 1.55ns/ft
Unbalanced Crosstalk (10ft, 5ns rise time)	
NE	– 0.8%
FE	– 1.8%

¹ Measured ground-signal-ground with Shield grounded

Features

Rugged flexible protection
Excellent electrical performance

SPECTRA-STRIP

Round 'n' Flat™ 159

Ribbon Cable in Round Jacket

Materials

Pitch	– 1.27mm
Reel Length	– 100 ft
Conductor	– 28AWG (7/36 strand) tinned Copper
Insulation	– PVC
Shield 1	– Aluminum/Poly
Shield 2	– Tinned Copper Braid
Liner between Jacket and Braid	– Paper

Jacket	– Black PVC
Temperature	– -20~105°C

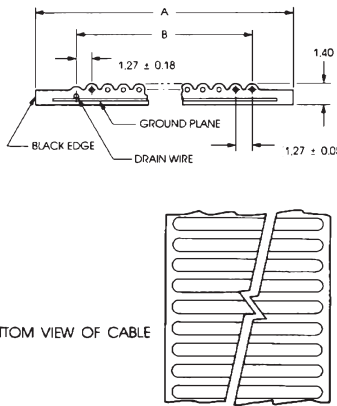
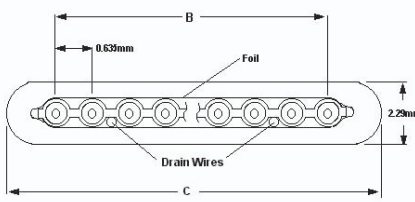
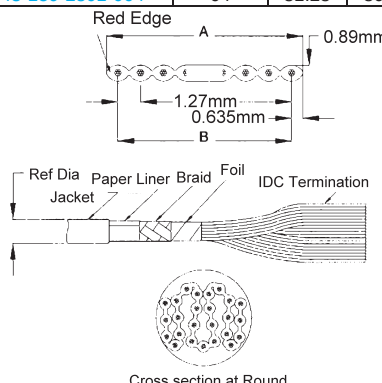
Electrical

Current	– 0.75A
Voltage	– 300V
Impedance	– 75Ω ¹
Capacitance	– 24pf/ft @ 1MHz ¹
Inductance	– 15μh/ft @ 1MHz ¹
Propagation delay	– 1.6ns/ft

¹ Measured ground-signal-ground with Shield grounded

Features

Round cable that mass terminates
Highly flexible
Helps meet FCC requirements
UL and CSA certified

Part Number:	No. of Cond.	Dimensions		Part Number:	No. of Cond.	Dimensions		Part Numbers:	No. of Cond.	Dimensions	
		A	B				C			A	B
843-133-2803-020	20	31.75	24.13	151-3033-010	10	5.72	8.00	843-159-2801-009	9	11.43	10.16
843-133-2803-026	26	39.37	31.75	151-3033-016	16	9.53	11.81	843-159-2801-010	10	12.70	11.43
843-133-2803-034	34	49.53	41.91	151-3033-020	20	12.07	14.35	843-159-2801-015	15	19.05	17.78
843-133-2803-040	40	57.15	49.53	151-3033-026	26	15.88	18.16	843-159-2801-016	16	20.32	19.05
843-133-2803-050	50	69.85	62.23	151-3033-034	34	20.96	23.24	843-159-2801-020	20	25.40	24.13
843-133-2803-060	60	82.55	74.93	151-3033-040	40	24.77	27.05	843-159-2801-024	24	30.48	29.21
				151-3033-050	50	31.12	33.40	843-159-2801-025	25	31.75	30.48
				151-3033-060	60	37.47	39.75	843-159-2801-026	26	33.02	31.75
				151-3033-064	64	40.01	44.83	843-159-2801-034	34	43.18	41.91
				151-3033-068	68	42.51	47.37	843-159-2801-036	36	45.72	44.45
				151-3033-080	80	50.17	52.45	843-159-2801-037	37	47.00	45.72
				151-3033-100	100	62.87	65.15	843-159-2801-040	40	50.80	49.53
								843-159-2801-050	50	63.50	62.23
								843-159-2801-060	60	76.20	74.93
								843-159-2801-064	64	81.28	80.01
											

For 0.635mm 30 AWG Ground Plane Ribbon Cable Use Spectra-GP® Part Number System: 133-3014-0XX Available in: 10; 16; 20; 26; 34; 40; 50; 60; 64; 80 and 100 positions. (Electrical characteristics vary from this specification sheet)				For 1.27mm 28 AWG Jacketed and Shielded Ribbon Cable Use Series 151 Part Number System: 843-151-2811-XXX Available in: 9; 10; 14; 15; 16; 20; 24; 25; 26; 34; 37; 40; 50; 60 and 64 positions. (Electrical characteristics vary from this specification sheet)				Alternate Round 'n' Flat Cable No Braid, Foil only 843-159-2801-1XX No Braid, No Foil 843-159-2801-2XX For 0.635mm pitch 30AWG Braid and Foil 159-3003-0XX No Braid, Foil only 159-3003-1XX No Braid, No Foil 159-3003-2XX Available in: 10; 16; 20; 26; 34; 40; 50; 60; 64; 68 and 80 positions			
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