G180 1.27mm Economical Flat Ribbon Cable

Materials

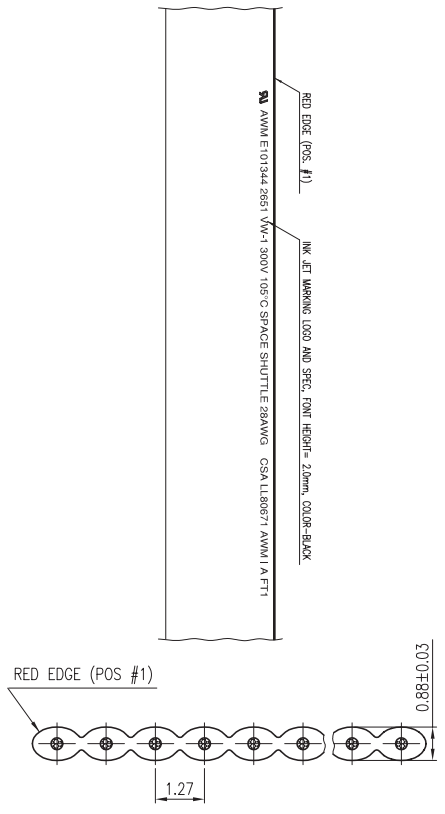
Pitch	– 1.27mm
Conductor	– 28AWG (7/36 strand) Tinned Copper
Laminate	– Clear PVC 94V-0
Temperature	– 80˚C

Electrical

Current	– 1A
Voltage	– 300V

Features

Allows for mass termination
Up to 64 conductors



Typical Flat Ribbon Cable

Part Number System:

G180 X X XX X

FLAT RIBBON CABLE
1.27mm Pitch

PACAGING LENGTH
1: 500 Feet
2: 400 Feet
3: 250 Feet
4: 200 Feet

WIRE SIZE
1: 26 AWG
2: 28 AWG
3: 30 AWG

VARIATION CODE
Blank: Standard

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

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.t%, FE = 4.3%
Propagation delay	– 1.5ns/ft nom.

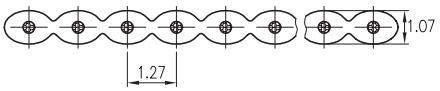
Features

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

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

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

Twist 'n' Flat® Twisted Pair Ribbon Cable

SPECTRA-STRIP

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	– 1.59ns/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

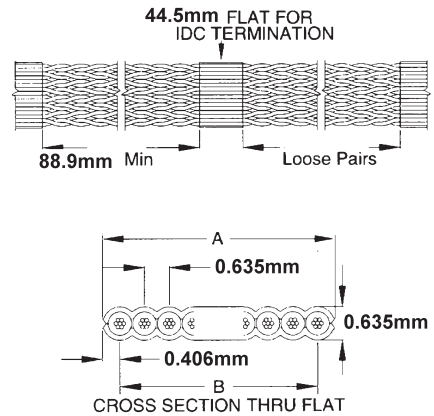
Current	– 0.75A
Voltage	– 150V
Impedance	– 80Ω[1] 110Ω[2]
Capacitance	– 20.3pf/ft @ 1MHz[1]
	– 15.9pf/ft @ 1MHz[2]
Propagation delay	– 1.59ns/ft
DC Resistance	– 95Ω/1000'
Delay Skew	– 0.035ns/ft max.

[1] Measured Single-Ended
[2] Measured Differentially

Features

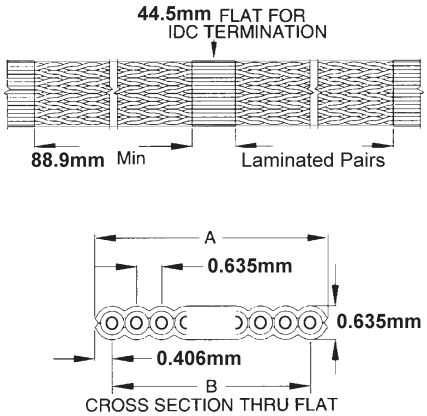
UL/CSA certified
Recommended for LVD SCSI high frequency
Significant crosstalk isolation
Fully laminated for tighter impedance control

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



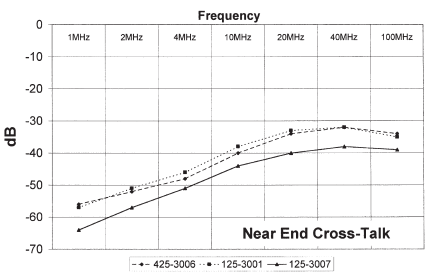
Typical 425-3006 Loose Pair Stranded Core TnF Planar Cable

Part Number:	No. of Pairs	Dimensions A	Dimensions B
125-3001-010	5	6.53	5.72
125-3001-014	7	9.07	8.26
125-3001-016	8	10.34	9.53
125-3001-020	10	12.88	12.07
125-3001-026	13	16.69	15.88
125-3001-034	17	21.77	20.96
125-3001-036	18	23.04	22.23
125-3001-040	20	25.58	24.77
125-3001-050	25	31.93	31.12
125-30010-60	30	38.28	37.47
125-3001-064	32	40.82	40.01
125-3001-068	34	43.36	42.55
125-3001-080	40	50.98	50.17
125-3001-100	50	63.68	62.87



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)

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



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

SPECTRA-STRIP

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

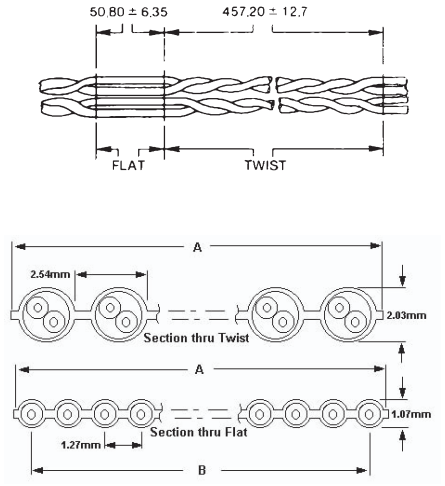
Electrical

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

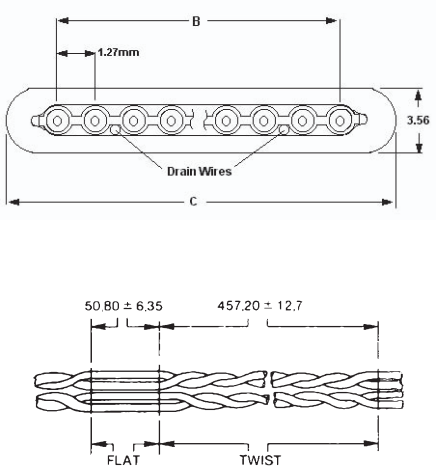
Part Number:	No. of Pairs	Dimensions A	Dimensions B
843-132-2801-010	5	13.36	11.43
843-132-2801-014	7	18.44	16.51
843-132-2801-016	8	20.98	19.05
843-132-2801-020	10	26.06	24.13
843-132-2801-026	13	33.68	31.75
843-132-2801-034	17	43.84	41.91
843-132-2801-036	18	46.38	44.45
843-132-2801-040	20	51.46	49.53
843-132-2801-050	25	64.16	62.23
843-132-2801-060	30	76.86	74.93
843-132-2801-064	32	81.94	80.01



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*

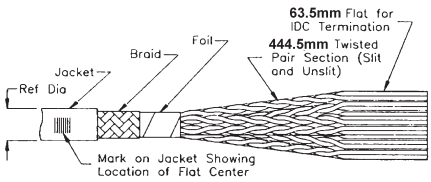
Part Number:	No. of Pairs	Dimensions C	Dimensions B
843-152-2831-010	5	14.99	11.43
843-152-2831-014	7	20.01	16.51
843-152-2831-016	8	22.61	19.05
843-152-2831-020	10	27.69	24.13
843-152-2831-026	13	35.31	31.75
843-152-2831-034	17	45.47	41.91
843-152-2831-040	20	53.09	49.53
843-152-2831-050	25	65.79	62.23
843-152-2831-060	30	78.49	74.93

Twist 'N' Flat configuration the same as 132 Series

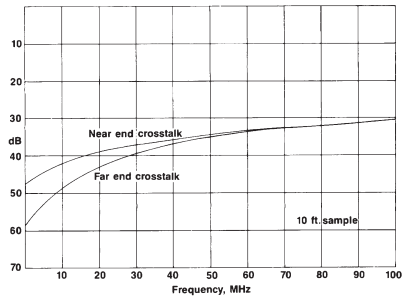


Alternate Jacketed Twist N Flat Cable
No Shield, No Drain 843-152-2811-0XX
Copper Mesh Shield 843-152-2821-0XX

Part Numbers:	No. of Pairs	Dimensions Outer Ø
843-159-2832-010	5	7.62
843-159-2832-014	7	8.38
843-159-2832-016	8	8.64
843-159-2832-020	10	9.65
843-159-2832-026	13	10.41
843-159-2832-034	17	11.43
843-159-2832-040	20	12.19
843-159-2832-050	25	13.46
843-159-2832-060	30	14.48
843-159-2832-064	32	14.73



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*

SS

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 avaialble 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

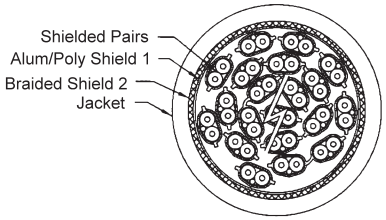
Part Number System:

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 AWG	Code	938	939	940	941	942	943	944	945	946	947	948	949
	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 AWG	Code	941	942	943	944	945	946	947	948	949	950	951	952
	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 AWG	Code	958	959	960	961	962	963	964	965	966	967	968	969
	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 AWG	Code	969	970	971	972	973	974	975	976	977	978	979	980
	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
Shield – Aluminum Poly Foil
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

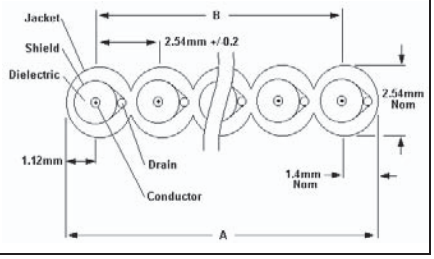
Part Number System:

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
	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



SS

Specialised Flat Ribbon Cable

SPECTRA-STRIP

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

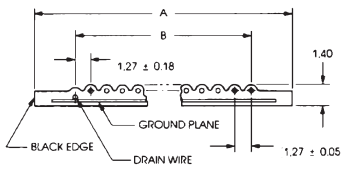
Current	– 1A
Voltage	– 300V
Impedance	– 65Ω[1]
Capacitance	– 29pf/ft[1]
Propagation delay	– 1.65ns/ft
Crosstalk (10' sample, 5ns rise time)	
NE	– 1.2%
FE	– 3.5%

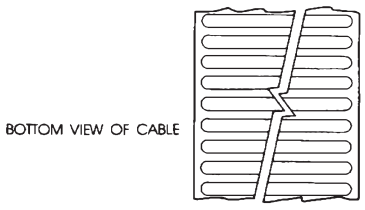
[1] Measured from Conductor to Ground

Features

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

Part Number:	No. of Cond.	Dimensions A	Dimensions B
843-133-2803-020	20	31.75	24.13
843-133-2803-026	26	39.37	31.75
843-133-2803-034	34	49.53	41.91
843-133-2803-040	40	57.15	49.53
843-133-2803-050	50	69.85	62.23
843-133-2803-060	60	82.55	74.93





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)

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
Drain Wire	– 30AWG (solid) tinned Copper
Jacket	– Black PVC
Temperature	– -20~105˚C

Electrical

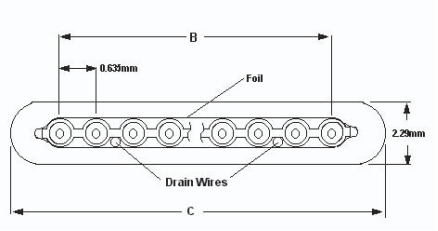
Current	– 0.8A
Voltage	– 150V
Impedance	– 55Ω[1]
Capacitance	– 30pf/ft @ 1MHz[1]
Inductance	– 12µh/ft @ 1MHz[1]
Propagation delay	– 1.55ns/ft
Unbalanced Crosstalk (10ft, 5ns rise time)	
NE	– 0.8%
FE	– 1.8%

[1] Measured ground-signal-ground with Shield grounded

Features

Rugged flexible protection
Excellent electrical performance

Part Number:	No. of Cond.	Dimensions	Dimensions C
151-3033-010	10	5.72	8.00
151-3033-016	16	9.53	11.81
151-3033-020	20	12.07	14.35
151-3033-026	26	15.88	18.16
151-3033-034	34	20.96	23.24
151-3033-040	40	24.77	27.05
151-3033-050	50	31.12	33.40
151-3033-060	60	37.47	39.75
151-3033-064	64	40.01	44.83
151-3033-068	68	42.51	47.37
151-3033-080	80	50.17	52.45
151-3033-100	100	62.87	65.15



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)

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

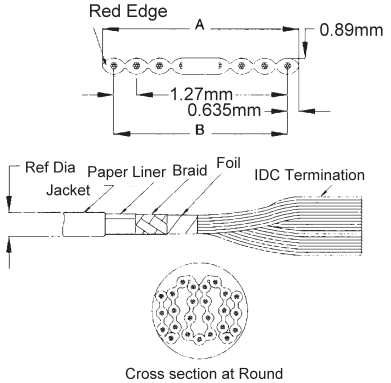
Current	– 0.75A
Voltage	– 300V
Impedance	– 75Ω[1]
Capacitance	– 24pf/ft @ 1MHz[1]
Inductance	– 15µh/ft @ 1MHz[1]
Propagation delay	– 1.6ns/ft

[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 Numbers:	No. of Cond.	Dimensions A	Dimensions B
843-159-2801-009	9	11.43	10.16
843-159-2801-010	10	12.70	11.43
843-159-2801-015	15	19.05	17.78
843-159-2801-016	16	20.32	19.05
843-159-2801-020	20	25.40	24.13
843-159-2801-024	24	30.48	29.21
843-159-2801-025	25	31.75	30.48
843-159-2801-026	26	33.02	31.75
843-159-2801-034	34	43.18	41.91
843-159-2801-036	36	45.72	44.45
843-159-2801-037	37	47.00	45.72
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



Cross section at Round

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