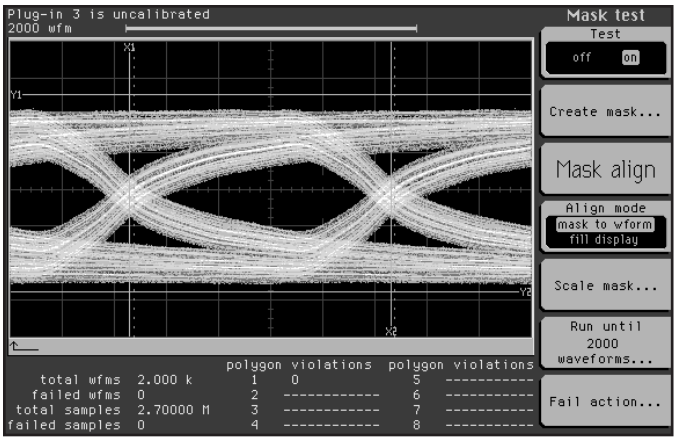
CellTec™ Parallel-Pair Cable

CellTec™ low-density foam dielectric delivers the stable performance characteristics required for high-speed differential signal transmission.

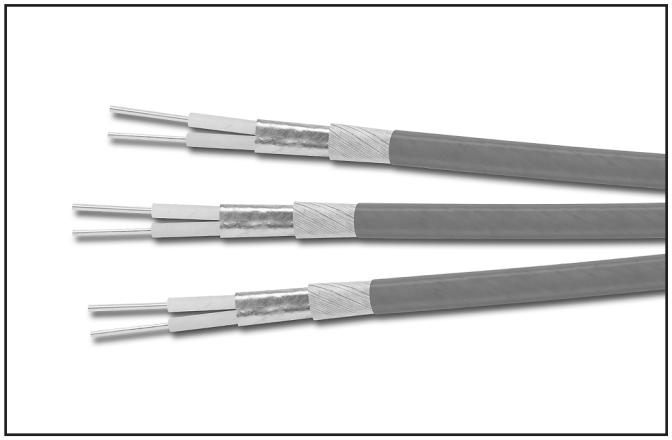
These low-skew parallel-pair constructions are designed for use in computer interconnect and telecommunications applications, and are compatible with 2 mm and 2.54 mm backplane systems.

Enhanced low-skew versions are available for system speeds to 2.5 Gbps and beyond.

These cables are just some examples of the performance levels provided by CellTec dielectric—many other configurations are also available.



Typical eye-pattern test.



Construction Details

Conductor: Solid or stranded silver-plated copper.

Insulation: CellTec.

Shield: Aluminum/polyester tape.

Drain Wire: Solid or stranded tin-plated copper.

Jacket: PVC.

Physical Properties

Conductor			Insulation Diameter	Drain Wire		Jacket Dimensions
AWG	Type	Diameter		AWG	Type	
22	Solid SPC	.0253 (.64)	.076 (1.9)	24	Solid TPC	.088 x .164 (2.2 x 4.2)
	7/30 SPC	.030 (.76)	.082 (2.1)		7/32 TPC	.094 x .176 (2.4 x 4.5)
24	Solid SPC	.0201 (.54)	.059 (1.5)	26	Solid TPC	.071 x .130 (1.8 x 3.3)
	7/32 SPC	.024 (.60)	.065 (1.7)		7/34 TPC	.077 x .142 (2.0 x 3.6)
26	Solid SPC	.0159 (.40)	.047 (1.2)	28	Solid TPC	.059 x .106 (1.5 x 2.7)
	7/34 SPC	.019 (.48)	.052 (1.3)		7/36 TPC	.062 x .116 (1.6 x 2.9)
28	Solid SPC	.0126 (.32)	.037 (.9)	30	Solid TPC	.049 x .086 (1.2 x 2.2)
	7/36 SPC	.015 (.38)	.042 (1.1)		7/38 TPC	.054 x .096 (1.4 x 2.4)
30	Solid SPC	.010 (.25)	.029 (.7)	32	Solid TPC	.041 x .070 (1.0 x 1.8)
	7/34 SPC	.012 (.30)	.033 (.8)		7/40 TPC	.045 x .078 (1.1 x 2.0)

Dimensions in inches (mm). **SPC:** Silver-plated copper. **TPC:** Silver-plated copper.

Electrical Performance

AWG	Impedance	Capacitance (pF/ft)	Time Delay Skew (ps / ft.)	Conductor DCR (Ω / 100 ft.)		Attenuation (dB / M @ 1.25 GHz)	
				Solid	Stranded	Solid Conductor	Stranded Conductor
22	100 Ω	12	<3.0	16.2	15.4	.70	.77
24	100 Ω	12	<3.0	25.7	24.0	.91	1.00
26	100 Ω	12	<3.0	41.0	38.8	1.11	1.22
28	100 Ω	12	<3.0	65.3	62.2	1.43	1.58
30	100 Ω	12	<3.0	104.0	98.0	1.67	1.84

All values are nominal unless otherwise indicated.

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