

Capacity	Comment
64kbps	Building Block for Fractional T1
1.544Mbps	North America
2.048Mbps	Europe, Asia
6.312Mbps	North America
8.448Mbps	Europe
34.368Mbps	Europe and Japan
44.736Mbps	672 DSOs
51.840Mbps	Optical Fiber
100.00Mbps	Wireless Broadband
Fast Ethernet	Optical Fiber: 3X5T
OC-3, STS3	Optical Fiber
OC-3c	Optical Fiber
OC-12, STS12	Optical Fiber
OC-48	Optical Fiber
OC-96	Optical Fiber
OC-192	Optical Fiber
OC-255	Optical Fiber



For Data and Communications

## High-Performance, High-Temperature Foamed Fluoropolymer Insulation

With the addition of cables with **CellTec** insulation to our family of high-performance, high-temperature wire and cable products, Thermax can offer yet another solution to your communications interconnection needs. With its outstanding performance characteristics, CellTec may be the answer you've been looking for.

- Characteristics:
- 200° C temperature rating
  - Consistent cell structure
  - Lightweight and robust
  - Thin-wall option

- Cable types:
- High-velocity coaxial cable
  - Parallel-pair cable, with enhanced low-skew versions available for system speeds to 2.5 Gbps and beyond
  - Custom configurations available, including thin-wall option

- Applications:
- Automated test equipment (ATE)
  - Telecommunications (DS3)
  - High-speed data I/O
  - Aerospace (High-speed serial bus, Fiber Channel, 1000 Base-T)

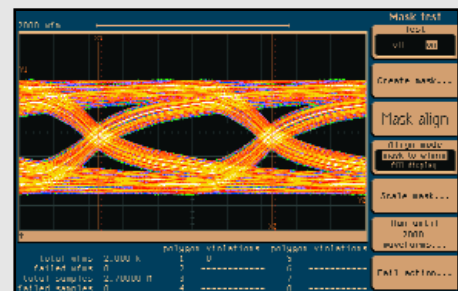
Contact your local Thermax sales office for more information.

**Thermax**

[www.thermaxcdt.com](http://www.thermaxcdt.com)



See other side for specifications.



Typical eye-pattern test (parallel pair)

## CellTec Parallel-Pair Cables

**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

AWG	Conductor		Insulation Diameter	Drain Wire		Jacket Dimensions	
	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)			7/32 TPC		
24	Solid SPC	.0201 (.54)	.059 (1.5)	26	Solid TPC	.071 x .130	(1.8 x 3.3)
	7/32 SPC	.024 (.60)			7/34 TPC		
26	Solid SPC	.0159 (.40)	.047 (1.2)	28	Solid TPC	.059 x .106	(1.5 x 2.7)
	7/34 SPC	.019 (.48)			7/36 TPC		
28	Solid SPC	.0126 (.32)	.037 (.9)	30	Solid TPC	.049 x .086	(1.2 x 2.2)
	7/36 SPC	.015 (.38)			7/38 TPC		
30	Solid SPC	.010 (.25)	.029 (.7)	32	Solid TPC	.041 x .070	(1.0 x 1.8)
	7/34 SPC	.012 (.30)			7/40 TPC		

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.

## CellTec Coaxial Cables

**Construction Details: Conductor:** Stranded silver-plated copper alloy.

**Insulation:** CellTec.

**Shield:** Tin- or silver-plated copper braid, 95% minimum coverage.

**Jacket:** Extruded FEP. Other jacket materials available.

### Physical Properties

AWG / Impedance	Conductor			Insulation Diameter	Shield Type	Jacket Diameter
	Material	Stranding	Diameter			
26 / 52Ω	SPCA	7 or 19	.019 (.48)	.050 (1.3)	SPC	.082 (2.1)
28 / 52Ω	SPCA	7 or 19	.015 (.38)	.040 (1.0)	SPC	.072 (1.8)
28 / 75Ω	SPCA	7 or 19	.015 (.38)	.064 (1.6)	SPC	.096 (2.4)
30 / 75Ω	SPCA	7 or 19	.012 (.30)	.050 (1.3)	SPC	.082 (2.1)

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

### Electrical Performance

AWG	Impedance	Capacitance (pF/ft)	Velocity of Propagation	Attenuation (dB / 100 feet @ 400 MHz)
26	52	24	82%	15.5
28	52	24	82%	20.3
28	75	16	84%	11.6
30	75	16	84%	14.6

All values are nominal unless otherwise indicated.