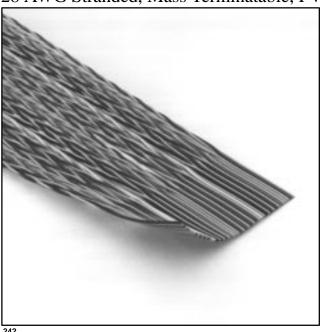
# .050" Twisted Pair Flat Cable

28 AWG Stranded, Mass Terminatable, PVC





- Can be mass terminated to broad line of IDC connectors
- Provides reduced crosstalk in balanced drive applications
- 28 AWG stranded wire provides flexibility and extended product life
- 10 color repeat

Date Issued: February 19, 1999

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## **Physical**

**Insulation** 

Material: Polyvinyl Chloride (PVC)

Color: 10 Color Repeat with Tan Common

**Marking**Standard: None

Canadian Option: AWM 20462 105C 300V VW1 3M NU CALAWM IA 80C 150V FT1

EU < 50V

**Conductors:** 28 AWG  $7 \times 36$  [  $7 \times 0.127$  ] Tinned Stranded Copper

### **Electrical**

Voltage Rating: USA: 300V Canada: 150V EU: <50V

**Insulation Resistance:**  $>1 \times 10^9 \Omega / 10 \text{ft } [3\text{m}]$ 

Unbalanced Balanced

**Characteristic Impedance:**  $101 \Omega$   $122 \Omega$ 

 $\begin{array}{cccc} \textbf{Capacitance:} & 15.9 \ pF/ft \ (52.2 \ pF/m) & 13.3 \ pF/ft \ (43.6 \ pF/m) \\ \textbf{Inductance:} & .16 \ \mu H/ft \ (0.52 \ \mu H/m) & .20 \ \mu H/ft \ (0.66 \ \mu H/m) \\ \textbf{Propagation Delay:} & 1.61 \ ns/ft \ (5.28 \ ns/m) & 1.63 \ ns/ft \ (5.35 \ ns/m) \\ \end{array}$ 

**Velocity of Propagation:** 63% 62%

Note: Unbalanced is measured between ground-signal-ground conductors. Balanced is measured between conductors within a pair.

#### **Environmental**

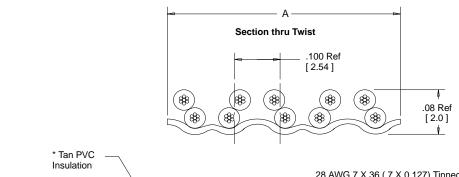
**Temperature Rating:** USA: -20° C to +105° C Canada: -20° C to +80° C

Flammability Rating: USA: VW-1 Canada: FT1

UL File No.: E42769, Style No.: 20462

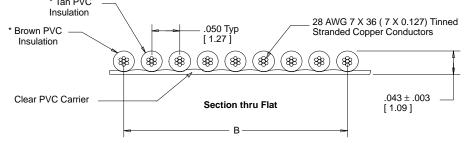
6801 River Place Blvd. Austin, TX 78726-9000 For technical, sales or ordering information call 800-225-5373

Number of Conductors	3M Part Number	Dimension A	Dimension B
10 (5 pair)	1700/10	0.50 [ 12.7 ]	0.450 ± .010 [ 11.43 ]
14 (7 pair)	1700/14	0.70 [ 17.8 ]	0.650 ± .010 [ 16.51 ]
16 (8 pair)	1700/16	0.80 [ 20.3 ]	0.750 ± .015 [ 19.05 ]
20 (10 pair)	1700/20	1.00 [ 25.4 ]	0.950 ± .015 [ 24.13 ]
26 (13 pair)	1700/26	1.30 [ 33.0 ]	1.250 ± .015 [ 31.75 ]
34 (17 pair)	1700/34	1.70 [ 43.2 ]	1.650 ± .020 [ 41.91 ]
36 (18 pair)	1700/36	1.80 [ 45.7 ]	1.750 ± .020 [ 44.45 ]
40 (20 pair)	1700/40	2.00 [ 50.8 ]	1.950 ± .020 [ 49.53 ]
50 (25 pair)	1700/50	2.50 [ 63.5 ]	2.450 ± .020 [ 62.23 ]
60 (30 pair)	1700/60	3.00 [ 76.2 ]	2.950 ± .020 [ 74.93 ]
64 (32 pair)	1700/64	3.20 [ 81.3 ]	3.150 ± .020 [ 80.01 ]

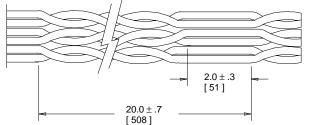








\* 10 Color Repeat Brown/Tan Red/Tan Orange/Tan Yellow/Tan Green/Tan Blue/Tan Violet/Tan Gray/Tan White/Tan Black/Tan



#### Inch [mm]

Tolerance Unless Noted					
	.0	.00	.000		
Inch	± .1	± .01	± .005		

[ ] Dimensions for Reference only

# Ordering Information

Blank = Standard
C = Canadian Certified
Version

Number of Conductors
(See Table)

#### Notes:

- 1. Available in standard lengths of 100 feet or 300 feet per roll, please specify when ordering.
- Standard product has a twist-flat repeat length of 20 inches (50.8 cm), with a 2-inch (5.1 cm) flat portion. For
  special requirements, please contact your 3M sales representative. The twist-flat repeat can be specified from
  8-1/2 inches (16.5 cm) to 48 inches (1.219 m), and the flat can be specified as anything over 1 inch (2.5 cm).

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