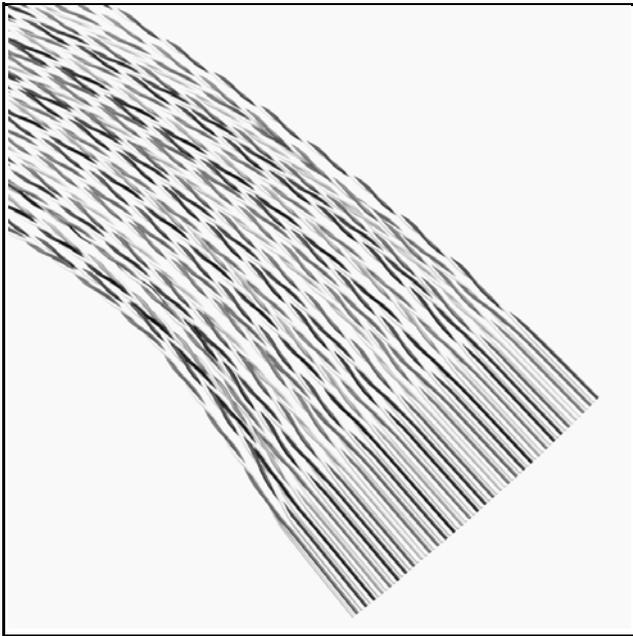


# 3M™ Twisted Pair Flat Cable

.050" 28 AWG Stranded, Mass Terminatable, PVC

3782 Series



- Combines the advantages of loose twisted pairs with flat section parts for mass termination
- Loose twisted pairs allow for easy routing
- Twisted pairs reduce crosstalk for balanced drive applications
- Zippable for branching or discrete termination
- Wires are color-coded for easy identification
- RoHS\* compliant

Date Modified: July 05, 2005

TS-0999-05  
Sheet 1 of 2

## Physical

**Insulation Material:** Polyvinyl Chloride (PVC)

**Color:** 10 Color Repeat with White Common

**Marking**

**Standard:** None

**Conductors:** 28 AWG 7 x 36 [ 7 x 0.127 ] Tinned Stranded Copper

## Electrical

**Voltage Rating:** USA: 300V EU: <50V

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

	<b>Unbalanced</b>	<b>Balanced</b>
<b>Characteristic Impedance:</b>	115 $\Omega$	139 $\Omega$
<b>Capacitance:</b>	43.6 pF/m (13.3 pF/ft)	36.1 pF/m (11.0 pF/ft)
<b>Inductance:</b>	.59 $\mu\text{H/m}$ (0.52 $\mu\text{H/ft}$ )	.69 $\mu\text{H/m}$ (0.21 $\mu\text{H/ft}$ )
<b>Propagation Delay:</b>	5.0 ns/m (1.53 ns/ft)	5.0 ns/m (1.53 ns/ft)
<b>Velocity of Propagation:</b>	66%	66%

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

## Environmental

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

**Flammability Rating:** USA: VW-1

\* RoHS = Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment  
"RoHS compliant" means that the product or part does not contain any of the following substances in excess of the following maximum concentration values in any homogeneous material, unless the substance is in an application that is exempt under RoHS: (a) 0.1% (by weight) for lead, mercury, hexavalent chromium, polybrominated biphenyls or polybrominated diphenyl ethers; or (b) 0.01% (by weight) for cadmium. Unless otherwise stated by 3M in writing, this information represents 3M's knowledge and belief based upon information provided by third party suppliers to 3M.

UL File No.: E42769, Style No.: 20488

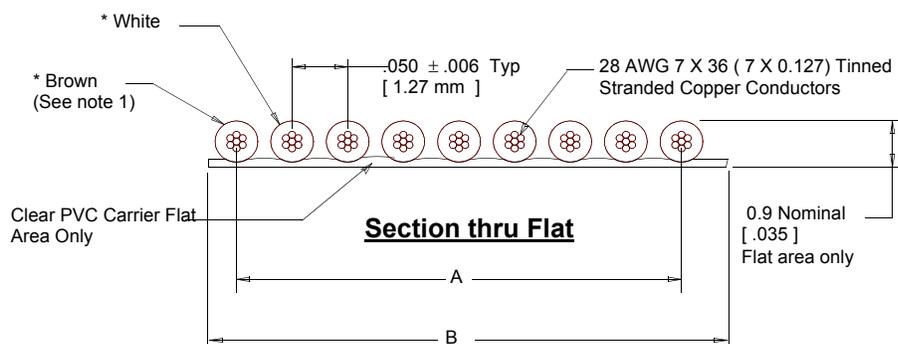
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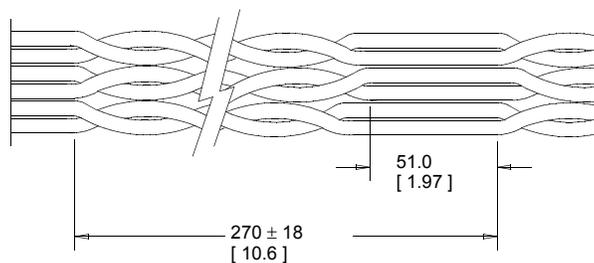
3782 Series



Number of Conductors	3M Part Number	Dimension A (mm)	Dimension B (mm)
10 (5 pair)	3782/10TV	11.43 ± 0.3 mm [ .45 ]	12.7 [ .50 ]
14 (7 pair)	3782/14TV	16.51 ± 0.3 mm [ .65 ]	17.8 [ .70 ]
16 (8 pair)	3782/16TV	19.05 ± 0.3 mm [ .75 ]	20.3 [ .82 ]
20 (10 pair)	3782/20TV	24.13 ± 0.5 mm [ .95 ]	25.4 [ 1.00 ]
26 (13 pair)	3782/26TV	31.75 ± 0.5 mm [ 1.25 ]	33.0 [ 1.30 ]
34 (17 pair)	3782/34TV	41.91 ± 0.5 mm [ 1.65 ]	43.2 [ 1.70 ]
40 (20 pair)	3782/40TV	49.53 ± 0.5 mm [ 1.95 ]	50.8 [ 2.00 ]
50 (25 pair)	3782/50TV	62.23 ± 0.5 mm [ 2.45 ]	63.5 [ 2.50 ]
60 (30 pair)	3782/60TV	74.93 ± 0.5 mm [ 2.95 ]	76.2 [ 3.00 ]
64 (32 pair)	3782/64TV	80.01 ± 0.6 mm [ 3.15 ]	81.3 [ 3.20 ]



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



Inch [mm]		Tolerance Unless Noted		
		.0	.00	.000
mm		±.3	±.15	

[ ] Dimensions for Reference only

Note: 1-Brown conductor indicates conductor number 1.

## Ordering Information

**3782/XX TV**

Number of conductors (See Table)

270 mm repeat

Notes:

1. Available in standard lengths of 100 feet per roll.

TS-0999-05

## Important Notice

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# 3M

## Electronics

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Minimum 10%  
Post-Consumer Fiber

Printed in USA.

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