

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
- See the Regulatory Information Appendix (RIA) in the "RoHS compliance" section of www.3Mconnector.com for compliance information (RIA E1 & C1 apply)

Date Modified: July 5, 2009

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Physical

Insulation Material: Polyvinyl Chloride (PVC)

Color: 10 Color Repeat with White Common

Marking:

Standard: None

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

Electrical

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

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

Characteristic Impedance:	Unbalanced	Balanced
	103 Ω	137 Ω

Capacitance:	14.8 pF/ft [48.5 pF/m]	11.1 pF/ft [36.3 pF/m]
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Inductance:	0.16 $\mu\text{H}/\text{ft}$ [0.52 $\mu\text{H}/\text{m}$]	0.21 $\mu\text{H}/\text{ft}$ [0.69 $\mu\text{H}/\text{m}$]
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Propagation Delay:	1.52 ns/ft [4.99 ns/m]	1.52 ns/ft [4.99 ns/m]
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Velocity of Propagation:	67%	67%
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Note: Unbalanced is measured between ground-signal-ground conductors. Balanced is measured between signal conductors within a pair.

Environmental

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

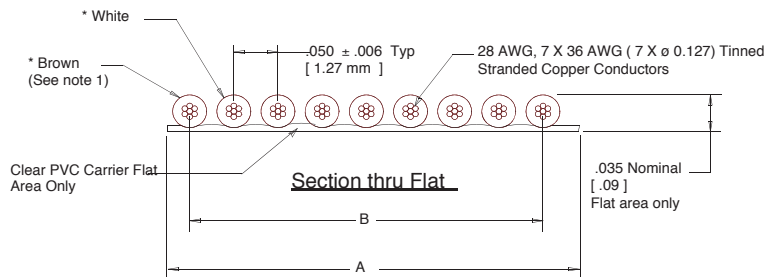
Flammability Rating: USA:VW-1

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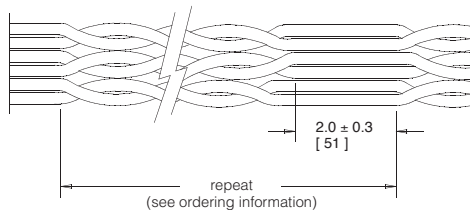
3782 Series

Number of Pairs	3M Part Number	Dimension A	Dimension B
5	3782-5P-XXXX 100FT	0.50 [12.70]	0.450 ± .010 [11.43]
7	3782-7P-XXXX 100FT	0.70 [17.80]	0.650 ± .010 [16.51]
8	3782-8P-XXXX 100FT	0.80 [20.30]	0.750 ± .010 [19.50]
10	3782-10P-XXXX 100FT	1.00 [25.40]	0.950 ± .020 [24.13]
12	3782-12P-XXXX 100FT	1.20 [30.50]	1.150 ± .020 [29.21]
13	3782-13P-XXXX 100FT	1.30 [33.00]	1.250 ± .020 [31.75]
15	3782-15P-XXXX 100FT	1.50 [38.10]	1.450 ± .020 [36.83]
17	3782-17P-XXXX 100FT	1.70 [43.20]	1.650 ± .020 [41.91]
20	3782-20P-XXXX 100FT	2.00 [50.80]	1.950 ± .020 [49.53]
25	3782-25P-XXXX 100FT	2.50 [63.50]	2.450 ± .020 [62.23]
30	3782-30P-XXXX 100FT	3.00 [76.20]	2.950 ± .020 [74.93]
32	3782-32P-XXXX 100FT	3.20 [81.30]	3.150 ± .020 [80.01]
34	3782-34P-XXXX 100FT	3.40 [86.40]	3.350 ± .020 [85.09]



* 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
Inch	±.1	±.01	±.005

[] Dimensions for Reference Only

Note:

1. Brown conductor indicates conductor number 1.
2. RIA E1 & C1 apply for all cables listed

Ordering Information

3782/XXP XXXA

270 = 270 mm repeat
540 = 540 mm repeat

Number of Pairs
(See Table)

Note: Available in standard 100 ft rolls. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

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