

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

TS-0999-E
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 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
103 Ω

Balanced
137 Ω

Capacitance: 14.8 pF/ft [48.5 pF/m]

11.1 pF/ft [36.3 pF/m]

Inductance: 0.16 $\mu\text{H/ft}$ [0.52 $\mu\text{H/m}$]

0.21 $\mu\text{H/ft}$ [0.69 $\mu\text{H/m}$]

Propagation Delay: 1.52 ns/ft [4.99 ns/m]

1.52 ns/ft [4.99 ns/m]

Velocity of Propagation: 67%

67%

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



Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

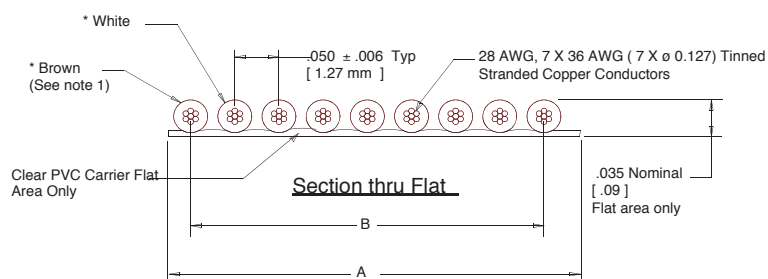
3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

3M™ Twisted Pair Flat Cable

.050" 28 AWG Stranded, Mass Terminatable, PVC

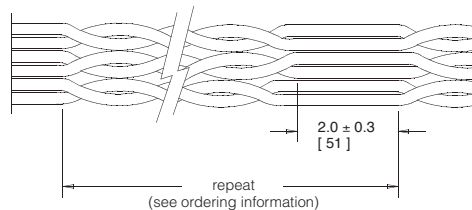
3782 Series

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



Note:

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

Inch
[mm]

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

[] Dimensions for Reference Only

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.

TS-0999-D
Sheet 2 of 2

3M

Electronic Solutions Division
Interconnect Solutions
<http://www.3Mconnector.com>

3M is a trademark of 3M Company.
For technical, sales or ordering information call
800-225-5373

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of one (1) year from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



3M Electronics Solutions Division

6801 River Place Blvd.
Austin, TX 78726-9000
U.S.A.
1-800-225-5373
www.3Mconnector.com

Please recycle. Printed in USA.
© 3M 2010. All rights reserved.
RIA-2217B-E

3M is a trademark of 3M Company.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

3M:

[3782-32P-540A](#)