

# 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](http://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  $\phi$  0.127 ] Tinned Stranded Copper

## Electrical

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

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

<b>Characteristic Impedance:</b>	<b>Unbalanced</b>	<b>Balanced</b>
	103 $\Omega$	137 $\Omega$

<b>Capacitance:</b>	14.8 pF/ft [ 48.5 pF/m ]	11.1 pF/ft [ 36.3 pF/m ]
---------------------	--------------------------	--------------------------

<b>Inductance:</b>	0.16 $\mu\text{H}/\text{ft}$ [ 0.52 $\mu\text{H}/\text{m}$ ]	0.21 $\mu\text{H}/\text{ft}$ [ 0.69 $\mu\text{H}/\text{m}$ ]
--------------------	--	--

<b>Propagation Delay:</b>	1.52 ns/ft [ 4.99 ns/m ]	1.52 ns/ft [ 4.99 ns/m ]
---------------------------	--------------------------	--------------------------

<b>Velocity of Propagation:</b>	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

**3M**

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

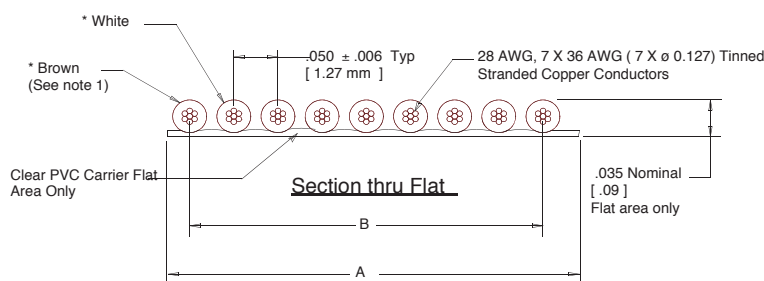
3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

# 3M™ Twisted Pair Flat Cable

.050" 28 AWG Stranded, Mass Terminatable, PVC

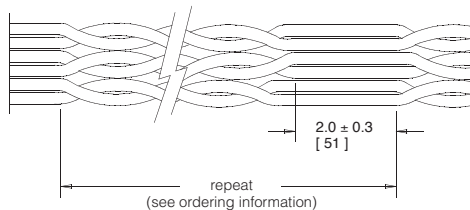
3782 Series

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



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.

TS-0999-D  
Sheet 2 of 2

**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](http://www.3Mconnector.com)

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

3M is a trademark of 3M Company.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.