

# 3M™ Shielded/Jacketed, Flat Cable

.050" 28 AWG Stranded, PVC/PVC

3517 Series



- Meets external wiring requirements of National Electrical Code, Article 725 (CL2)
- UL listed for USA and Canadian markets
- 28 AWG stranded wire on .050 inch centers permits mass termination to broad line of IDC connectors
- 360 degree expanded copper shielding provides 20 db average shielding effectiveness
- Primary cable is zippable for branching or discrete terminations
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of [www.3M.com/Interconnects](http://www.3M.com/Interconnects) for compliance information (RIA E1 & C1 apply)

Date Modified: December 8, 2009

TS-0069-D  
Sheet 1 of 2

## Physical

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

Color: Black

Primary Material: PVC

Color: Gray

### Marking:

Standard: (UL) CL2 75C 28 AWG or AWM 20879 3M NU C  AWM IIA/B 80C 300V FT1 EU <50V

**Conductors:** 28 AWG, 7 × 36 AWG [ 7 × Ø 0.127 ] Tinned Stranded Copper

Shielding Material: Expanded Copper

## Electrical

**Voltage Rating:** USA: N.E.C. 725, CL2 or AWM 300V    Canada: <50V    EU: <50V

**Insulation Resistance:** (Primary Cable) > 1 × 10<sup>10</sup> Ω/10 ft. [ 3 m ]

| Characteristic Impedance: | Unbalanced | Balanced |
|---------------------------|------------|----------|
|                           | 70 Ω       | 119 Ω    |

|                     |                          |                          |
|---------------------|--------------------------|--------------------------|
| <b>Capacitance:</b> | 21.5 pF/ft [ 70.5 pF/m ] | 12.7 pF/ft [ 41.7 pF/m ] |
|---------------------|--------------------------|--------------------------|

|                    |                          |                          |
|--------------------|--------------------------|--------------------------|
| <b>Inductance:</b> | 0.11 µH/ft [ 0.35 µH/m ] | 0.18 µH/ft [ 0.59 µH/m ] |
|--------------------|--------------------------|--------------------------|

|                           |                          |                          |
|---------------------------|--------------------------|--------------------------|
| <b>Propagation Delay:</b> | 1.51 ns/ft [ 4.95 ns/m ] | 1.51 ns/ft [ 4.95 ns/m ] |
|---------------------------|--------------------------|--------------------------|

|                                 |     |     |
|---------------------------------|-----|-----|
| <b>Velocity of Propagation:</b> | 67% | 67% |
|---------------------------------|-----|-----|

Note: Unbalanced is measured between ground-signal-ground conductors, with shield grounded. Balanced is measured between signal conductors within a pair, with the shield floating.

## Environmental

**Temperature Rating:** USA: CL2; 75°C or AWM: -20°C to +80°C    Canada: 80°C

**Flammability Rating:** USA: N.E.C. 725, CL2    Canada: FT1

UL File No.: E118773, Power Limited Circuit Cable: CL2 (or AWM Style 20879)

# 3M™ Shielded/Jacketed, Flat Cable

.050" 28 AWG Stranded, PVC/PVC

3517 Series

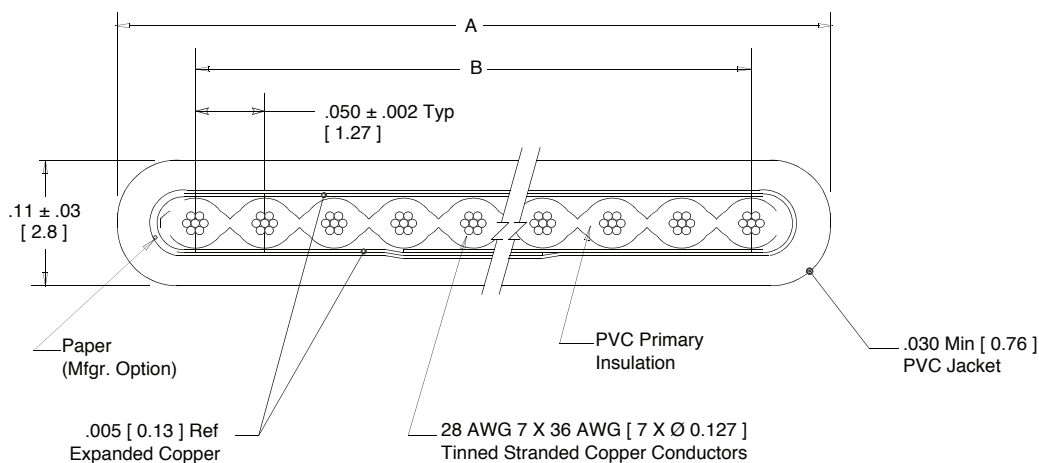


Inch  
[mm]

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

[ ] Dimensions for Reference Only

| Number of Conductors | 3M Part Number | Dimension A<br>± .040" | Dimension B            |
|----------------------|----------------|------------------------|------------------------|
| 09                   | 3517/09        | .58 [ 14.7 ]           | 0.400 ± .007 [ 10.16 ] |
| 10                   | 3517/10        | .63 [ 16.0 ]           | 0.450 ± .007 [ 11.43 ] |
| 14                   | 3517/14        | .83 [ 21.1 ]           | 0.650 ± .007 [ 16.51 ] |
| 15                   | 3517/15        | .88 [ 22.4 ]           | 0.700 ± .007 [ 17.78 ] |
| 16                   | 3517/16        | .93 [ 23.6 ]           | 0.750 ± .011 [ 19.05 ] |
| 20                   | 3517/20        | 1.13 [ 28.7 ]          | 0.950 ± .011 [ 24.13 ] |
| 24                   | 3517/24        | 1.33 [ 33.8 ]          | 1.150 ± .011 [ 29.21 ] |
| 25                   | 3517/25        | 1.38 [ 35.0 ]          | 1.200 ± .011 [ 30.48 ] |
| 26                   | 3517/26        | 1.43 [ 36.3 ]          | 1.250 ± .011 [ 31.75 ] |
| 30                   | 3517/30        | 1.63 [ 41.4 ]          | 1.450 ± .015 [ 36.83 ] |
| 34                   | 3517/34        | 1.83 [ 46.5 ]          | 1.650 ± .015 [ 41.91 ] |
| 36                   | 3517/36        | 1.93 [ 49.0 ]          | 1.750 ± .015 [ 44.45 ] |
| 37                   | 3517/37        | 1.98 [ 50.3 ]          | 1.800 ± .015 [ 45.72 ] |
| 40                   | 3517/40        | 2.13 [ 54.1 ]          | 1.950 ± .015 [ 49.53 ] |
| 50                   | 3517/50        | 2.63 [ 66.8 ]          | 2.450 ± .015 [ 62.23 ] |
| 60                   | 3517/60        | 3.13 [ 79.5 ]          | 2.950 ± .015 [ 74.93 ] |
| 64                   | 3517/64        | 3.38 [ 85.9 ]          | 3.150 ± .015 [ 80.01 ] |



Note: Red marking on edge of primary cable designates wire #1.

## Ordering Information

**3517/XX XX**

Blank = Standard  
C = Canadian Certified Version

Number of Conductors  
(See Table)

Blank = Standard  
SF = Splice Free

Note: Available in standard 100 ft or 300 ft rolls, please specify when ordering. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

TS-0069-D  
Sheet 2 of 2



Interconnect Solutions

<http://www.3M.com/interconnects/>

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.3m.com/interconnects](http://www.3m.com/interconnects)

Please recycle. Printed in USA.  
© 3M 2008. All rights reserved.  
RIA-2217B-E

3M is a trademark of 3M Company.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)

[www.lifeelectronics.ru](http://www.lifeelectronics.ru)