## .050"/1.27mm Round-Jacketed, Shielded, Twisted Pair Flat Cable 28 AWG Stranded, Mass Terminatable, PVC/PVC



- 28 AWG stranded wire to provide flexibility
- Twisted pairs reduce crosstalk for balanced drive applications
- Wire are colour coded for easy identification
- Jacket is round for better flexibility
- Flat section parts for mass termination
- Shielding provides excellent EMI/ESD protection


## Physical

Insulation<br>Material: Polyvinyl Chloride (PVC) Color: Grey<br>Primary Material PVC<br>Marking<br>Standard: UL AWM 2935 VW-1 300V 80C E65859 3M EU <50V<br>Conductors 28 AWG $7 \times 36$ [ $7 \times 0.127$ ] Tinned Stranded Copper<br>Shielding Tinned Copper Braid Shield, $80 \%$ min. coverage

## Electrical

| Voltage Rating: | USA: $300 \mathrm{~V} \quad \mathrm{EU}:<50 \mathrm{~V}$ |  |
| ---: | :--- | :--- |
| Insulation Resistance: | $>1 \times 10^{10} \Omega / 10 \mathrm{ft}[3 \mathrm{~m}]$ |  |
|  | Unbalanced | Balanced |
| Characteristic Impedance: | $71 \Omega$ | $123 \Omega$ |
| Capacitance: | $24.1 \mathrm{pF} / \mathrm{ft}(79.1 \mathrm{pF} / \mathrm{m})$ | $13.9 \mathrm{pF} / \mathrm{ft}(45.6 \mathrm{pF} / \mathrm{m})$ |
| Inductance: | $.12 \mu \mathrm{H} / \mathrm{ft}(0.39 \mu \mathrm{H} / \mathrm{m})$ | $.21 \mu \mathrm{H} / \mathrm{ft}(0.69 \mu \mathrm{H} / \mathrm{m})$ |
| Propagation Delay: | $1.72 \mathrm{~ns} / \mathrm{ft}(5.64 \mathrm{~ns} / \mathrm{m})$ | $1.71 \mathrm{~ns} / \mathrm{ft}(5.61 \mathrm{~ns} / \mathrm{m})$ |
| Velocity of Propagation: | 59\% | $59 \%$ |

Note: Unbalanced is measured between conductors within a pair with one conductor connected to the shield. Balanced is measured between conductors within a pair with the shield floating.

## Environmental

Temperature Rating: $-20^{\circ} \mathrm{C}$ to $+80^{\circ} \mathrm{C}$
Flammability Rating: UL: VW-1

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| Pairs | Approx. outside <br> diameter finish (mm) | Approx weight (g/m) |
| :---: | :---: | :---: |
| 5 | 8.0 | 60 |
| 7 | 8.3 | 65 |
| 8 | 9.2 | 70 |
| 10 | 9.9 | 80 |
| 12 | 10.0 | 90 |
| 13 | 10.1 | 95 |
| 15 | 10.2 | 105 |
| 17 | 10.4 | 115 |
| 20 | 12.0 | 135 |
| 25 | 12.4 | 160 |
| 30 | 13.5 | 180 |
| 32 | 14.5 | 230 |



10 Colour Repeat

| brown/ <br> white | red/ <br> white | orange/ <br> white | yellow/ <br> white | green/ <br> white | blue/ <br> white | purple/ <br> white | grey/ <br> white | pink/ <br> white | black/ <br> white |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

*Colour identification consists of 10 two-colour pairs made by combinations of white with one each of 10 colours - namely brown, red, orange, yellow, green, blue, purple, grey, pink or black. From the 11th pair on, the same colour combinations are repeated.

## Ordering Information

3784/XXP-540
$\rceil_{\text {Number of pairs }}$
(See Table)

## 3M Electronic Products Division

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

