3M™ Pleated Foil Shielded Cable

.025” 30 AWG Solid, TPE Primary, TPE Cover

90211 Series

- Can be used with IDC mass termination connectors
- Can be used in applications requiring standard impedance of 75 ohms single ended
- Extremely low crosstalk, used in the all signal mode to quadruple signal density as compared to standard .050 inch flat ribbon cable
- Perfect for board-to-board applications within electronic equipment, TPE cover prevents pleated copper foil from accidental shorting
- Solid pleated copper foil provides flexibility and 35 db average shielding effectiveness

Date Modified: May 30, 2003
TS-0598-08
Sheet 1 of 2

Physical

Cover
Material: Thermoplastic Elastomer (TPE)
Color: Gray
Primary Material: Thermoplastic Elastomer (TPE)
Marking: None

Canadian Option:  AWM 20674 105C 150V VW-1 3M CU  AWM IA 105C 150V FTI
EU <50V

Conductors: 30 AWG [ 0.254 ] Tinned Solid Copper
Shielding: Solid, Pleated, Copper Foil

Electrical

Voltage Rating: USA: 150V Canada: 150V EU: <50V
Insulation Resistance: (Primary Cable) >1x10^{10} \Omega /10 ft. [ 3m ]
Unbalanced Balanced
Characteristic Impedance 72Ω 129Ω
Capacitance 21.0 pF/ft [ 68.9 pF/m ] 11.6 pF/ft [ 38.1 pF/m ]
Inductance 11 \mu H/ft [ 0.36 \mu H/m ] 0.19 \mu H/ft [ 0.62 \mu H/m ]
Propagation Delay 1.51 ns/ft [ 4.95 ns/m ] 1.50 ns/ft [ 4.92 ns/m ]
Velocity of Propagation 67% 68%

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

Environmental

Temperature Rating: -20°C to +105°C
Flammability Rating: USA: VW-1 Canada: FT1

UL File No.: E42769, Style No.: 20674

3M Interconnect Solutions
http://www.3M.com/interconnects/
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.025” 30 AWG Solid, TPE Primary, TPE Cover

90211 Series

<table>
<thead>
<tr>
<th>Number of Conductors</th>
<th>3M Part Number</th>
<th>Dimension A = .04</th>
<th>Dimension B</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>90211/20</td>
<td>.025 ± .002 Typ [0.64]</td>
<td>0.62 ± .004 [15.8]</td>
</tr>
<tr>
<td>26</td>
<td>90211/26</td>
<td>.025 ± .002 Typ [0.64]</td>
<td>0.77 ± .004 [19.6]</td>
</tr>
<tr>
<td>36</td>
<td>90211/36</td>
<td>.025 ± .002 Typ [0.64]</td>
<td>1.02 ± .006 [25.9]</td>
</tr>
<tr>
<td>40</td>
<td>90211/40</td>
<td>.025 ± .002 Typ [0.64]</td>
<td>1.12 ± .006 [28.5]</td>
</tr>
<tr>
<td>50</td>
<td>90211/50</td>
<td>.025 ± .002 Typ [0.64]</td>
<td>1.37 ± .009 [34.8]</td>
</tr>
<tr>
<td>68</td>
<td>90211/68</td>
<td>.025 ± .002 Typ [0.64]</td>
<td>1.82 ± .012 [46.2]</td>
</tr>
<tr>
<td>80</td>
<td>90211/80</td>
<td>.025 ± .002 Typ [0.64]</td>
<td>2.12 ± .012 [53.9]</td>
</tr>
<tr>
<td>100</td>
<td>90211/100</td>
<td>.025 ± .002 Typ [0.64]</td>
<td>2.62 ± .015 [66.6]</td>
</tr>
</tbody>
</table>

Note: Standard length is 100 ft/roll.

Ordering Information

90211/XXX
Blank = Standard
C = Canadian Certified Version
Number of Conductors (See Table)

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

Inch
[mm]

<table>
<thead>
<tr>
<th>Tolerance Unless Noted</th>
</tr>
</thead>
<tbody>
<tr>
<td>.[-00 .00 .000]</td>
</tr>
</tbody>
</table>

[ ] Dimensions for Reference only

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

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