

### CABLE CONSTRUCTION

1. Fluoropolymer Jacket (Clear)
2. Silver-Plated Copper Shield
3. Aluminum / Polyimide Shield
4. Silver-Plated Copper Flat Strip Braid
5. PTFE Dielectric
6. Silver-Plated Copper Conductor



This cable is particularly suitable for GPS, TCAS, MLS and SATCOM installations. It is lower loss, more flexible and less than half the weight of RG214 and less than one third the weight of RG393.

This special coaxial design incorporates a multi-layered shielding technique that combines conventional shields with an inner braid woven of flat strips of silver plated copper. This “unitized” shield reduces attenuation at frequencies over 1 GHz when compared to round wire braids in standard coaxial cables. Additionally, the cable VSWR is lower because the braids can be applied more uniformly. The attenuation and VSWR variation due to aging and flexure is substantially less.

It is Skydrol resistant, RoHS compliant and meets the FAA flammability requirements of FAR Part 23 and 25, Appendix F; complies with MIL-C-17 as applicable.

### PHYSICAL DATA

|                                 |                  |
|---------------------------------|------------------|
| • Conductor                     | 15 AWG Solid SPC |
| • Operating Temperature         | -55° to +200°C   |
| • Outer Diameter: in (mm)       | 0.23 (5.72)      |
| • Minimum Bend Radius: in (mm)  | 1.20 (30.48)     |
| • Weight: lbs/100 ft (kg/100 m) | 5.4 (8.0)        |

### ELECTRICAL DATA

|                                      |  |
|--------------------------------------|--|
| • Impedance: ohms                    | 50                                     |
| • Capacitance: pF/ft (m)             | 25.0 (82.0)                            |
| • Velocity of Propagation: %         | 80.0                                   |
| • Time Delay: ns/ft (m)              | 1.27 (4.17)                            |
| • RF Shielding Effectiveness: dB/min | -90                                    |
| • DC Resistance: ohms/1000 ft (m)    | 3.3 (10.7)                             |
| • Attenuation: Nom / Max             | dB/100 ft (dB/100 m)                   |
| • @400 MHz                           | 4.4 / 4.8 (14.4 / 15.7)                |
| • @1.0 GHz                           | 7.0 / 7.7 (23.0 / 25.3)                |
| • @1.6 GHz                           | 8.9 / 9.8 (29.2 / 32.2)                |
| • @5.0 GHz                           | 16.1 / 17.7 (52.8 / 58.1)              |
| • K Values (nom loss):               | K1 = 0.215, K2 = 0.000179              |
| • Formula for Attenuation:           | $(K1 * \sqrt{F(MHz)}) + (K2 * F(MHz))$ |

*All values nominal unless otherwise noted*

**PIC P/N**                      **CONNECTOR TYPE**

**ARINC**

|               |                            |
|---------------|----------------------------|
| <b>190519</b> | <b>404 Size 1</b>          |
| <b>190501</b> | <b>600 Size 1</b>          |
| <b>190502</b> | <b>600 Modified Size 1</b> |
| <b>190503</b> | <b>404/600 Size 5</b>      |

**M39012**

| <b>PIC P/N</b> | <b>CONNECTOR TYPE</b>    | <b>PIC P/N</b> | <b>CONNECTOR TYPE</b>    |
|----------------|--------------------------|----------------|--------------------------|
| <b>190512</b>  | <b>BNC Straight Plug</b> | <b>110580</b>  | <b>QMA Straight Plug</b> |
| <b>190513</b>  | <b>BNC 90° Plug</b>      | <b>110581</b>  | <b>QMA 90° Plug</b>      |
| <b>190527</b>  | <b>BNC Inline Jack</b>   | <b>190514</b>  | <b>SMA Straight Plug</b> |
| <b>190506</b>  | <b>C Straight Plug</b>   | <b>190515</b>  | <b>SMA 90° Plug</b>      |
| <b>190507</b>  | <b>C 90° Plug</b>        | <b>190525</b>  | <b>SMA Inline Jack</b>   |
| <b>190504</b>  | <b>HN Straight Plug</b>  | <b>190508</b>  | <b>TNC Straight Plug</b> |
| <b>190505</b>  | <b>HN 90° Plug</b>       | <b>190509</b>  | <b>TNC 90° Plug</b>      |
| <b>190510</b>  | <b>N Straight Plug</b>   | <b>190531</b>  | <b>TNC 75° Plug</b>      |
| <b>190511</b>  | <b>N 90° Plug</b>        | <b>190523</b>  | <b>TNC Inline Jack</b>   |
| <b>190524</b>  | <b>N Inline Jack</b>     | <b>190521</b>  | <b>TNC Bulkhead Jack</b> |
| <b>190522</b>  | <b>N Bulkhead Jack</b>   |                |                          |

*Die Sets Available On Loan Or For Purchase From PIC  
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