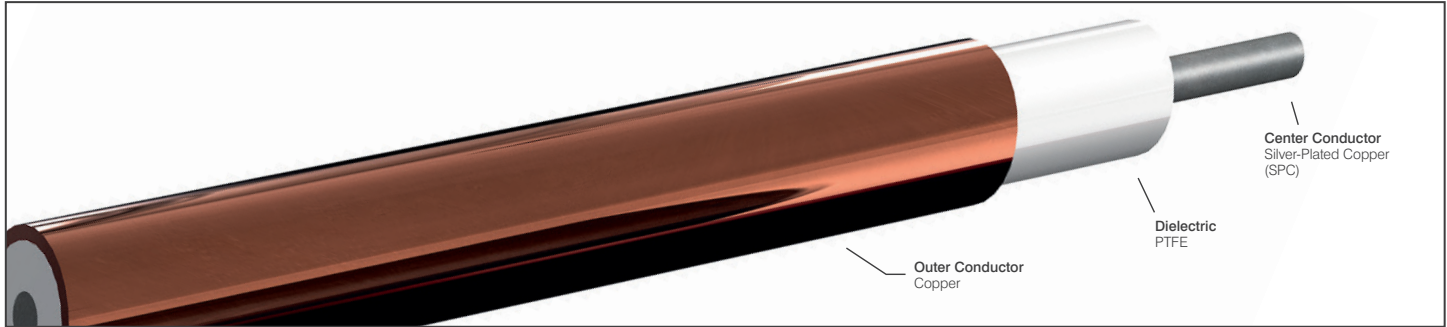


## Semi-Rigid Coaxial Cables

P/N UT-070C | 50 Ω Copper Outer Conductor

### INTRODUCTION



All of our 50 Ω copper semi-rigid cables feature low attenuation and VSWR covering the entire microwave spectrum. With numerous connector options available off-the-shelf, this family of cables is one of the most versatile available today. They meet the demands of package density and provide total shielding for elimination of signal loss and noise.

### DIMENSIONS

|                           |       |               |
|---------------------------|-------|---------------|
| Outer Conductor Diameter  | in    | 0.070 ± 0.001 |
|                           | mm    | 1.778 ± 0.025 |
| Center Conductor Diameter | in    | 0.0179        |
|                           | mm    | 0.4547        |
| Length (Maximum)          | Feet  | 20            |
|                           | Meter | 6.10          |

### MATERIALS

|                         |        |
|-------------------------|--------|
| Outer Conductor         | Copper |
| Outer Conductor Plating | None   |
| Dielectric              | PTFE   |
| Center Conductor        | SPC    |
| RoHS Compliant          | ✓      |

### MECHANICAL CHARACTERISTICS\*

|                                 |             |       |
|---------------------------------|-------------|-------|
| Outer Conductor Integrity Temp. | °C          | 135   |
| Operating Temperature (Max)     | °C          | 100   |
| Inside Bend Radius (Minimum)    | in          | 0.125 |
|                                 | mm          | 3.175 |
| Weight                          | lbs / 100ft | 0.80  |
|                                 | kg / 100m   | 1.20  |

\* Applicable at room temperature. Contact factory for performance over temperature range.

### ELECTRICAL CHARACTERISTICS\*

|                                   |              |       |
|-----------------------------------|--------------|-------|
| Characteristic Impedance          | ohm          | 50    |
| Capacitance                       | pF / ft      | 29.0  |
|                                   | pF / m       | 95.2  |
| Corona Extinction Voltage         | VRMS @ 60 Hz | 1200  |
| Voltage Withstanding              | VRMS @ 60 Hz | 4800  |
| Higher Order Mode Frequency       | GHz          | 68.0  |
| Attenuation (Db / 100 Ft Typical) | @ 0.5 GHz    | 15.2  |
|                                   | @ 1.0 GHz    | 21.7  |
|                                   | @ 5.0 GHz    | 50.9  |
|                                   | @ 10.0 GHz   | 74.4  |
|                                   | @ 18.0 GHz   | 103.7 |
|                                   | @ 26.5 GHz   | 129.7 |
|                                   | @ 40.0 GHz   | 165.5 |
|                                   | @ 50.0 GHz   | 189.4 |
| Power (Watts Cw @ 20 °C, Maximum) | @ 65.0 GHz   | 222.6 |
|                                   | @ 90.0 GHz   | N/A   |
|                                   | @ 0.5 GHz    | 124   |
|                                   | @ 1.0 GHz    | 86.9  |
|                                   | @ 5.0 GHz    | 37.4  |
|                                   | @ 10.0 GHz   | 25.7  |
|                                   | @ 18.0 GHz   | 18.6  |
|                                   | @ 26.5 GHz   | 14.9  |
|                                   | @ 40.0 GHz   | 11.8  |
|                                   | @ 50.0 GHz   | 10.3  |
| @ 65.0 GHz                        | 8.8          |       |
| @ 90.0 GHz                        | N/A          |       |