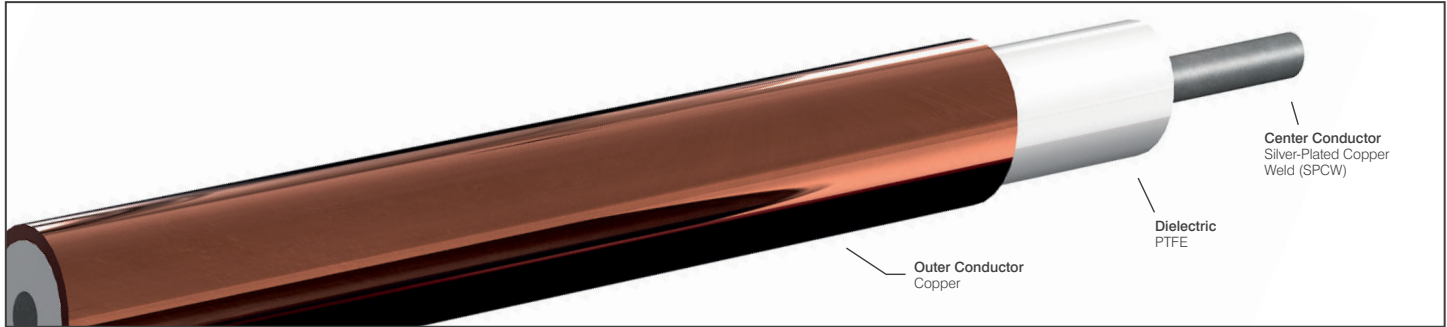


## Semi-Rigid Coaxial Cables

P/N UT-141-70 | 70 Ω Copper Outer Conductor

### INTRODUCTION



With impedances from 5 to 100 Ω and diameters from 0.020 to 0.250", our odd-impedance semi-rigid cables are the right solution for any impedance-matching requirement.

### DIMENSIONS

|                           |       |               |
|---------------------------|-------|---------------|
| Outer Conductor Diameter  | in    | 0.141 ± 0.001 |
|                           | mm    | 3.581 ± 0.025 |
| Center Conductor Diameter | in    | 0.0201        |
|                           | mm    | 0.5105        |
| Length (Maximum)          | Feet  | 20            |
|                           | Meter | 6.10          |

### MATERIALS

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

### MECHANICAL CHARACTERISTICS\*

|                                 |             |       |
|---------------------------------|-------------|-------|
| Outer Conductor Integrity Temp. | °C          | 150   |
| Operating Temperature (Max)     | °C          | 125   |
| Inside Bend Radius (Minimum)    | in          | 0.188 |
|                                 | mm          | 4.775 |
| Weight                          | lbs / 100ft | 3.87  |
|                                 | kg / 100m   | 5.81  |

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

### ELECTRICAL CHARACTERISTICS\*

|                                      |              |       |
|--------------------------------------|--------------|-------|
| Characteristic Impedance             | ohm          | 70    |
| Capacitance                          | pF / ft      | 20.7  |
|                                      | pF / m       | 68.0  |
| Corona Extinction Voltage            | VRMS @ 60 Hz | 3200  |
| Voltage Withstanding                 | VRMS @ 60 Hz | 9600  |
| Higher Order Mode Frequency          | GHz          | 43.0  |
| Attenuation<br>(Db / 100 Ft Typical) | @ 0.5 GHz    | 9.2   |
|                                      | @ 1.0 GHz    | 13.3  |
|                                      | @ 5.0 GHz    | 32    |
|                                      | @ 10.0 GHz   | 47.7  |
|                                      | @ 18.0 GHz   | 67.8  |
|                                      | @ 26.5 GHz   | 86.2  |
|                                      | @ 40.0 GHz   | 112.1 |
|                                      | @ 50.0 GHz   | N/A   |
| Power (Watts Cw<br>@ 20 °C, Maximum) | @ 0.5 GHz    | 409.5 |
|                                      | @ 1.0 GHz    | 285.4 |
|                                      | @ 5.0 GHz    | 120.2 |
|                                      | @ 10.0 GHz   | 81.5  |
|                                      | @ 18.0 GHz   | 57.9  |
|                                      | @ 26.5 GHz   | 46    |
|                                      | @ 40.0 GHz   | 35.7  |
|                                      | @ 50.0 GHz   | N/A   |
|                                      | @ 65.0 GHz   | N/A   |
|                                      | @ 90.0 GHz   | N/A   |