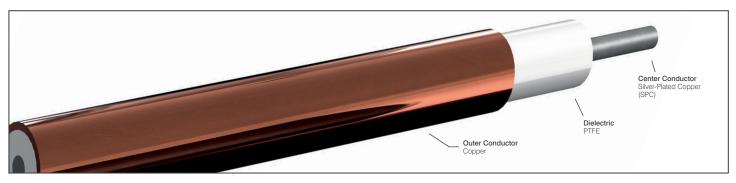


## Semi-Rigid Coaxial Cables P/N UT-141C | 50 $\Omega$ Copper Outer Conductor

## INTRODUCTION



All of our 50  $\Omega$  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    | 0.141 ± 0.001 |
|                           | mm    | 3.581 ± 0.025 |
| Center Conductor Diameter | in    | 0.0362        |
|                           | mm    | 0.9195        |
| 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          | 175   |  |  |
| Operating Temperature (Max)     | °C          | 125   |  |  |
| Inside Bend Radius (Minimum)    | in          | 0.075 |  |  |
|                                 | mm          | 1.905 |  |  |
| Weight                          | lbs / 100ft | 3.32  |  |  |
|                                 | kg / 100m   | 4.98  |  |  |

\* 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 | 1900  |  |  |
| Voltage Withstanding                 | VRMS @ 60 Hz | 9600  |  |  |
| Higher Order Mode<br>Frequency       | GHz          | 34.0  |  |  |
|                                      | @ 0.5 GHz    | 7.6   |  |  |
|                                      | @ 1.0 GHz    | 11.3  |  |  |
|                                      | @ 5.0 GHz    | 27.6  |  |  |
|                                      | @ 10.0 GHz   | 41.6  |  |  |
| Attenuation<br>(Db / 100 Ft Typical) | @ 18.0 GHz   | 59.6  |  |  |
|                                      | @ 26.5 GHz   | 76.2  |  |  |
|                                      | @ 40.0 GHz   | N/A   |  |  |
|                                      | @ 50.0 GHz   | N/A   |  |  |
|                                      | @ 65.0 GHz   | N/A   |  |  |
|                                      | @ 90.0 GHz   | N/A   |  |  |
| Power (Watts Cw<br>@ 20 °C, Maximum) | @ 0.5 GHz    | 600.4 |  |  |
|                                      | @ 1.0 GHz    | 450   |  |  |
|                                      | @ 5.0 GHz    | 180   |  |  |
|                                      | @ 10.0 GHz   | 120   |  |  |
|                                      | @ 18.0 GHz   | 83    |  |  |
|                                      | @ 26.5 GHz   | 65.6  |  |  |
|                                      | @ 40.0 GHz   | N/A   |  |  |
|                                      | @ 50.0 GHz   | N/A   |  |  |
|                                      | @ 65.0 GHz   | N/A   |  |  |
|                                      | @ 90.0 GHz   | N/A   |  |  |



See our complete line of Semi-Rigid Coaxial Cables at: CarlislelT.com/products/wire-cable/semi-rigid-coaxial-cables +1 (800) 458-9960 Sales@CarlislelT.com