## Semi-Rigid Coaxial Cables

P/N UT-085C-SP | $50 \Omega$ Silver-Plated 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 | $0.0865+0.002 /-0.0010$ |
|  | mm | $2.1971+0.0508 /-0.0254$ |
| Center Conductor Diameter | in | 0.0201 |
|  | mm | 0.5105 |
| Length (Maximum) | Feet | 20 |
|  | Meter | 6.10 |


| MATERIALS |  |
| :--- | :--- |
| Outer Conductor | Copper |
| Outer Conductor Plating | Silver |
| Dielectric | PTFE |
| Center Conductor | SPC |
| RoHS Compliant | $\checkmark$ |

## MECHANICAL CHARACTERISTICS*

| Outer Conductor Integrity Temp. | ${ }^{\circ} \mathrm{C}$ | 175 |
| :--- | :--- | :--- |
| Operating Temperature (Max) | ${ }^{\circ} \mathrm{C}$ | 125 |
| Inside Bend Radius (Minimum) | in | 0.050 |
|  | mm | 1.270 |
|  | $\mathrm{lbs} / 100 \mathrm{ft}$ | 1.43 |
|  | $\mathrm{~kg} / 100 \mathrm{~m}$ | 2.15 |

* 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 | 1500 |
| Voltage Withstanding | VRMS @ 60 Hz | 5400 |
| Higher Order Mode Frequency | GHz | 61.0 |
| Attenuation (Db / 100 Ft Typical) | @ 0.5 GHz | 13.6 |
|  | @ 1.0 GHz | 19.5 |
|  | @ 5.0 GHz | 46 |
|  | @ 10.0 GHz | 67.4 |
|  | @ 18.0 GHz | 94.3 |
|  | @ 26.5 GHz | 118.3 |
|  | @ 40.0 GHz | 151.5 |
|  | @ 50.0 GHz | 173.8 |
|  | @ 65.0 GHz | N/A |
|  | @ 90.0 GHz | N/A |
| Power (Watts Cw @ $20^{\circ} \mathrm{C}$, Maximum) | @ 0.5 GHz | 173.5 |
|  | @ 1.0 GHz | 121.5 |
|  | @ 5.0 GHz | 52.2 |
|  | @ 10.0 GHz | 35.8 |
|  | @ 18.0 GHz | 25.8 |
|  | @ 26.5 GHz | 20.7 |
|  | @ 40.0 GHz | 16.3 |
|  | @ 50.0 GHz | 14.3 |
|  | @ 65.0 GHz | N/A |
|  | @ 90.0 GHz | N/A |

See our complete line of Semi-Rigid Coaxial Cables at:
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