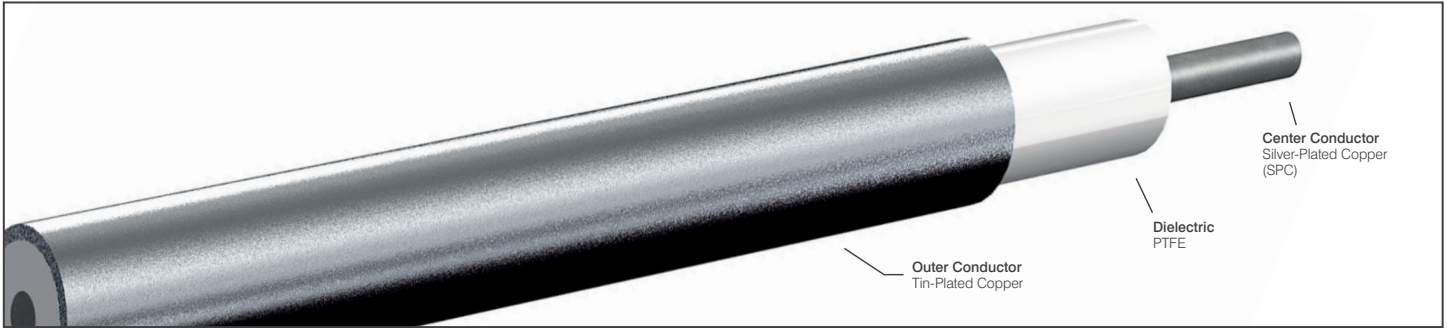


# Semi-Rigid Coaxial Cables

P/N UT-250A-TP-M17 | 50 Ω Tin-Plated 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    | 0.250 + 0.002 /-0.001 |
|                           | mm    | 6.350 + 0.051 /-0.025 |
| Center Conductor Diameter | in    | 0.0641                |
|                           | mm    | 1.6281                |
| Length (Maximum)          | Feet  | 20                    |
|                           | Meter | 6.10                  |

## MATERIALS

|                         |        |
|-------------------------|--------|
| Outer Conductor         | Copper |
| Outer Conductor Plating | Tin    |
| Dielectric              | PTFE   |
| Center Conductor        | SPC    |
| RoHS Compliant          | ✓      |

## MECHANICAL CHARACTERISTICS\*

|                                 |             |       |
|---------------------------------|-------------|-------|
| Outer Conductor Integrity Temp. | °C          | 150   |
| Operating Temperature (Max)     | °C          | 100   |
| Inside Bend Radius (Minimum)    | in          | 0.125 |
|                                 | mm          | 3.175 |
| Weight                          | lbs / 100ft | 10.38 |
|                                 | kg / 100m   | 15.58 |

\* 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 | 3000   |
| Voltage Withstanding              | VRMS @ 60 Hz | 16800  |
| Higher Order Mode Frequency       | GHz          | 19.0   |
| Attenuation (Db / 100 Ft Typical) | @ 0.5 GHz    | 4.3    |
|                                   | @ 1.0 GHz    | 6.7    |
|                                   | @ 5.0 GHz    | 17.4   |
|                                   | @ 10.0 GHz   | 27     |
|                                   | @ 18.0 GHz   | 40     |
|                                   | @ 26.5 GHz   | N/A    |
|                                   | @ 40.0 GHz   | N/A    |
|                                   | @ 50.0 GHz   | N/A    |
|                                   | @ 90.0 GHz   | N/A    |
| Power (Watts Cw @ 20 °C, Maximum) | @ 0.5 GHz    | 1061.4 |
|                                   | @ 1.0 GHz    | 728.6  |
|                                   | @ 5.0 GHz    | 290.1  |
|                                   | @ 10.0 GHz   | 189.5  |
|                                   | @ 18.0 GHz   | 129.7  |
|                                   | @ 26.5 GHz   | N/A    |
|                                   | @ 40.0 GHz   | N/A    |
|                                   | @ 50.0 GHz   | N/A    |
|                                   | @ 90.0 GHz   | N/A    |