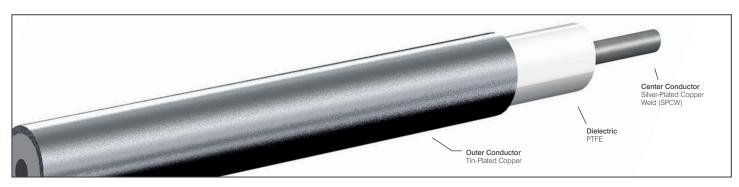
AmphenolCIT Cable & Interconnect Technologies Wire & Cable

## **Semi-Rigid Coaxial Cables**

P/N UT-034-TP-M17 | 50 Ω Tin-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    | 0.034 ± 0.002/-0.001 |
|                           | mm    | 0.864 ± 0.051/-0.025 |
| Center Conductor Diameter | in    | 0.0080               |
|                           | mm    | 0.2032               |
| Length (Maximum)          | Feet  | 15                   |
|                           | Meter | 4.57                 |

| MATERIALS               |        |
|-------------------------|--------|
| Outer Conductor         | Copper |
| Outer Conductor Plating | Tin    |
| 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          | 0.050 |  |  |
|                                 | mm          | 1.270 |  |  |
| Weight                          | lbs / 100ft | 0.22  |  |  |
|                                 | kg / 100m   | 0.33  |  |  |

\* 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 | 750   |  |  |
| Voltage Withstanding                 | VRMS @ 60 Hz | 2100  |  |  |
| Higher Order Mode<br>Frequency       | GHz          | 155.0 |  |  |
|                                      | @ 0.5 GHz    | 34    |  |  |
|                                      | @ 1.0 GHz    | 48.3  |  |  |
|                                      | @ 5.0 GHz    | 110.4 |  |  |
|                                      | @ 10.0 GHz   | 158.5 |  |  |
| Attenuation                          | @ 18.0 GHz   | 216.5 |  |  |
| (Db / 100 Ft Typical)                | @ 26.5 GHz   | 266.6 |  |  |
|                                      | @ 40.0 GHz   | 333.7 |  |  |
|                                      | @ 50.0 GHz   | 377.5 |  |  |
|                                      | @ 65.0 GHz   | 437   |  |  |
|                                      | @ 90.0 GHz   | 525.5 |  |  |
| Power (Watts Cw<br>@ 20 °C, Maximum) | @ 0.5 GHz    | 30.5  |  |  |
|                                      | @ 1.0 GHz    | 21.5  |  |  |
|                                      | @ 5.0 GHz    | 9.5   |  |  |
|                                      | @ 10.0 GHz   | 6.6   |  |  |
|                                      | @ 18.0 GHz   | 4.8   |  |  |
|                                      | @ 26.5 GHz   | 3.9   |  |  |
|                                      | @ 40.0 GHz   | 3.2   |  |  |
|                                      | @ 50.0 GHz   | 2.8   |  |  |
|                                      | @ 65.0 GHz   | 2.4   |  |  |
|                                      | @ 90.0 GHz   | 2     |  |  |

Learn More: Amphenol-CIT.com

+1 (800) 458-9960