Wire \& Cable

## Semi-Rigid Coaxial Cables

## P/N UT-141-SA-M17 | $50 \Omega$ 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 |  |  | ELECTRICAL CHARACTERISTICS* |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Characteristic Impedance | ohm | 50 |
| Outer Conductor Diameter | in | $0.141 \pm 0.001$ | Capacitance | pF / ft | 29.0 |
|  | mm | $3.581 \pm 0.025$ |  | pF/m | 95.2 |
| Center Conductor Diameter | in | 0.0362 | Corona Extinction Voltage | VRMS @ 60 Hz | 1900 |
|  | mm | 0.9195 | Voltage Withstanding | VRMS @ 60 Hz | 9600 |
| Length (Maximum) | Feet | 20 | Higher Order Mode Frequency | GHz | 34.0 |
|  | Meter | 6.10 |  |  |  |
|  |  |  | Attenuation (Db / 100 Ft Typical) | @ 0.5 GHz | 7.6 |
| MATERIALS |  |  |  | @ 1.0 GHz | 11.3 |
|  |  |  | @ 5.0 GHz | 27.6 |
| Outer Conductor | Copper |  |  | @ 10.0 GHz | 41.6 |
| Outer Conductor Plating | None |  |  | @ 18.0 GHz | 59.6 |
| Dielectric | PTFE |  |  | @ 26.5 GHz | 76.2 |
| Center Conductor | SPCW |  |  | @ 40.0 GHz | N/A |
| RoHS Compliant | $\checkmark$ |  |  | @ 50.0 GHz | N/A |
|  |  |  |  | @ 65.0 GHz | N/A |
| MECHANICAL CHARACTERISTICS* |  |  |  | @ 90.0 GHz | N/A |
| Outer Conductor Integrity Temp. | ${ }^{\circ} \mathrm{C}$ | 175 |  | Power (Watts Cw @ $20^{\circ} \mathrm{C}$, Maximum) | @ 0.5 GHz | 600.4 |
| Operating Temperature (Max) | ${ }^{\circ} \mathrm{C}$ | 125 | @ 1.0 GHz |  | 450 |
| Inside Bend Radius (Minimum) | in | 0.075 | @ 5.0 GHz |  | 180 |
|  | mm | 1.905 | @ 10.0 GHz |  | 120 |
| Weight | lbs / 100ft | 3.29 | @ 18.0 GHz |  | 83 |
|  | kg / 100m | 4.94 | @ 26.5 GHz |  | 65.6 |
| *Applicable at room temperature. Contact factory for performance over temperature range. |  |  | @ 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:
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