

# Temp-Flex Foam-Core Low-Loss Flexible Microwave Cable >

Providing both customized and off-the-shelf options, Temp-Flex Foam-Core Low-Loss Flexible Microwave Cable combines space savings with an effective dielectric that eliminates “phase knee” and provides ease of termination

## FEATURES AND ADVANTAGES

### Achieves 80% velocity of propagation (VOP) loss characteristics

Delivers reliable signal performance and low loss characteristics at high frequencies

### Extruded fluoropolymer insulation eliminates the phase-knee effect

Delivers linear electrical performance at room temperature.

### Tight impedance control +/- 1 Ohm

Achieves superior RF performance at high frequencies

### Closed-cell foam structure

Provides moisture barrier

### Utilizes a foamed dielectric rather than a tape-wrapped expanded PTFE (ePTFE) construction

Eliminates the phase knee at room temperature, which means the cable’s performance is more phase stable during temperature swings

### Thermally and mechanically stable at high temperatures

Withstands higher soldering temperatures to provide ease of termination

### Shielding effectiveness better than 100 dB at high frequencies

Offers high RF noise immunity and low EMI

### Standard offering 047, 086 and 141 shield OD

Offers lightweight, highly flexible construction options



## MARKETS AND APPLICATION

### Data Center Solutions and Telecommunications/Networking

Test and measurement

### Medical

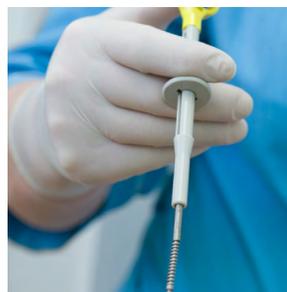
Imaging equipment  
Patient monitors  
Surgical equipment/devices  
Ultrasound equipment  
Endoscopy devices  
Catheters

### Aerospace and Defense\*

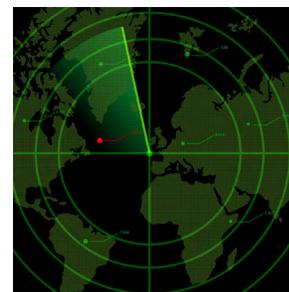
Radar  
SATCOM  
Electronic warfare  
Data centers  
Microwave/RF communications



Patient Monitor



Catheter



Radar

# Temp-Flex Foam-Core Low-Loss Flexible Microwave Cable

## SPECIFICATIONS

### Reference Information

Packaging: 304.8mm (12-inch) Reels  
UL File No.: E61522, Style: 1354  
Mates With: High-frequency RF Connectors  
(i.e., SMA, SMP, SMPM, 2.92mm, 2.4mm)  
Use With: RF Connectors  
Designed In: Inches  
RoHS: Yes

### Construction Custom Options Available

Center Conductor: 28 to 18 AWG, solid or  
stranded, silver-plated copper  
Dielectric: Foamed Fluoropolymer  
Shield: Helical Foil and Braid  
Jacket Material: FEP, Polyurethane, Others

### Electrical

Impedance: 50 Ohms  $\pm 1$   
Nominal Time Delay: 0.387 to 0.405 ns/m  
(1.270 to 1.33 ns/ft)  
(Construction Dependent)  
Time-Delay Tolerance:  
 $\pm 3.038$  ps/m ( $\pm 10$  ps/ft) Typical  
Insertion Loss: Dependent on Specific  
Order Number  
Cutoff Frequency: Dependent on Specific  
Order Number  
Shielding Effectiveness:  $> 100$  dB

### Physical

Fire Resistance: V-0 (UL 1351)  
Operating Temperature  
FEP: -65 to +165°C  
Polyurethane: -30 to +165°C

[www.molex.com/tempflex/foamcoremw.html](http://www.molex.com/tempflex/foamcoremw.html)