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# Temp-Flex Solid-Core Flexible Microwave Cable >

Providing both customized and off-the-shelf cost-effective options, Temp-Flex Solid-Core Flexible Microwave Cable provides a cabling option that delivers excellent performance consistency, high flex life along with smaller bend radius and more phase stability with respect to flexure compared to other cable types

## FEATURES AND ADVANTAGES

Achieves 70% velocity of propagation (VOP) loss characteristics Delivers reliable signal performance and low loss characteristics at high frequencies

Thermally and mechanically stable at high temperatures Withstands higher soldering temperatures to provide ease of termination

Helically wrapped flat wire shield with round or flat braid Provides flexible alternative to Semi-Rigid Cable



Extruded fluoropolymer insulation eliminates the phase-knee effect Delivers linear electrical performance at room temperature

Solid PFA Extrusion Provides moisture barrier Shielding effectiveness better than 100 dB at high frequencies Offers high RF noise immunity and low EMI

## Tight impedance

control +/- 1 Ohm Achieves superior RF performance at high frequencies

Standard offering 047,

**086 and 141 shield OD** Offers lightweight, highly flexible construction options

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# MARKETS AND APPLICATIONS

Data Center Solutions and Telecommunications/ Networking Test and measurement

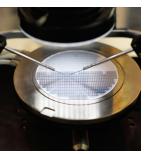
#### **Medical**

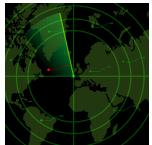
Imaging equipment Patient monitors Surgical equipment/devices Ultrasound equipment Endoscopy devices Catheters

#### **Aerospace and Defense**

Radar SATCOM Electronic warfare Data centers Microwave/RF communications







Endoscope

DUT

Radar

### **SPECIFICATIONS**

#### **Reference Information**

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

#### Construction Custom Options Available

Center Conductor: 29 to 19 AWG, Solid or stranded Silver-plated Copper Dielectric: PFA (Fluoropolymer) Shield: Helically wrapped flat-wire shield with round or flat braid Jacket Material: FEP, Polyurethane, Other

#### **Electrical**

Impedance: 50 Ohms ±1 Nominal Time Delay: 4.77 ns/m (1.455 ns/ft) (Construction Dependent) Time-Delay Tolerance: ±3.038 ps/m (±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/link/templexflexiblemwcable.html