

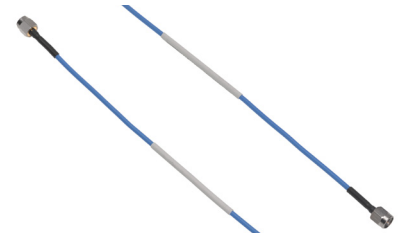
Flexible Microwave Cable Assemblies



Flexible Microwave Cable Assemblies deliver high performance with proven cable technology and connector termination expertise

High-performance, Flexible Microwave Cable Assemblies replace stiff and difficult-to-install semi-rigid assemblies. Constructed from Temp-Flex coaxial cables and Molex RF connectors, the Flexible Microwave Cables offer excellent electrical properties and are assembled using proprietary techniques to minimize Voltage Standing Wave Ratio (VSWR) and insertion loss for the ideal cable and connector combination.

The cables come standard with silver-plated conductors, fluoropolymer (PFA) dielectric, double shields and FEP jacket. The solid-core low-loss cables use proprietary low-loss PFA dielectric with 70% velocity of propagation (VoP). The air-dielectric ultra-low-loss cables use a unique air-enhanced design with up to 87% VoP. Connector options include SMA, 2.92mm, SMP, SMPM and many others.

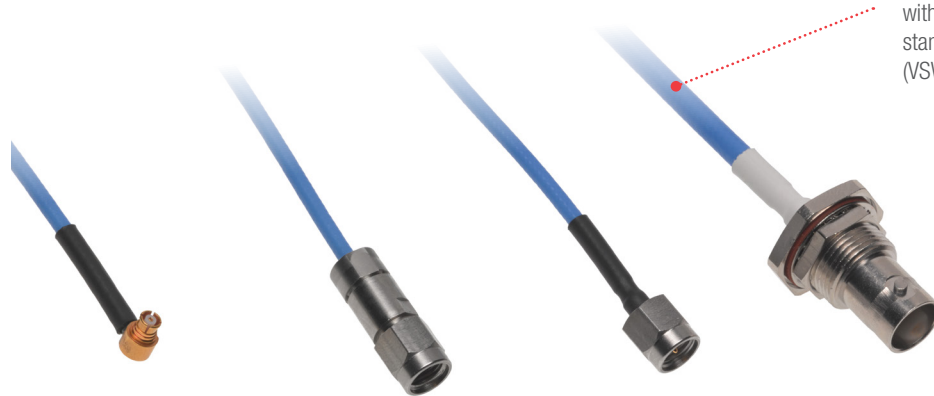


Flexible Microwave Cable Assemblies with Temp-Flex Solid-Core Low-Loss and Air-Dielectric Ultra-Low-Loss Cables

Features and Benefits

Cable impedance of 50 ± 1 Ohms
Provides consistent electrical performance

Dual shielded using helically wrapped foil covered by a braided shield
Delivers excellent shielding effectiveness greater than 100 dB



Air-dielectric, ultra-low-loss assemblies
Used for assemblies with lowest possible attenuation

Solid-core low-loss fluoropolymer (PFA)
Provides assemblies with low voltage standing wave ratio (VSWR)

Proprietary air-dielectric, ultra-low-loss connector-to-cable termination expertise
Ensures optimized cable assembly performance

Ordering Information

Temp-Flex Cable Performance Characteristics*

| Cable Part No.* | Impedance (Ohms) | VOP (%) | Capacitance | Static Bend Radius (min.) | Center Conductor | Insulation | Jacket | Outside Diameter | Cut-Off Frequency |
|-----------------|------------------|---------|-------------|---------------------------|------------------|------------|--------|------------------|-------------------|
| 100067-1047 | 50+/-1 | 70 | 29 pF/ft | 0.20" | 0.0113" | PFA | FEP | .061" | 112 GHz |
| 100067-1086 | | | | 0.30" | 0.0201" | | | .101" | 62 GHz |
| 100067-1141 | | | | 0.50" | 0.036" | | | .158" | 41 GHz |
| 100054-0007 | | 87 | 23.0 pF/ft | 0.30" | 0.0126" | | | .056" | 143 GHz |
| 100054-0006 | | 87 | 23.4 pF/ft | 0.38" | 0.0253" | | | .101" | 72 GHz |
| 100054-0008 | | 87 | 23.3 pF/ft | 0.75" | 0.0453" | | | .158" | 42 GHz |
| 100054-0027 | | 87 | 23.3 pF/ft | 1.00" | 0.0571" | | | .210 | 31 GHz |
| 100054-0028 | | 87 | 23.3 pF/ft | 1.60" | 0.0907" | | | .310 | 19 GHz |

*Part numbers are for design reference only; not published on molex.com

Flexible Microwave Cable Assemblies



Ordering Information

Temp-Flex Air-Dielectric Ultra-Low-Loss cables

| Order No. | Connector-to-Connector | Cable Type | Length (mm/inches) | Voltage Standing Wave Ratio (VSWR) | Insertion Loss (dB) |
|------------|----------------------------------|--------------------|--------------------|------------------------------------|---------------------|
| 89762-1320 | 2.92mm ST Plug to 2.92mm ST Plug | 086 Ultra-Low-Loss | 152.40 / 6.00 | 1.50 max. to 35 GHz | 0.9 |
| 89762-1321 | | | 228.60 / 9.00 | | 1.2 |
| 89762-1322 | | | 304.80 / 12.00 | | 1.6 |
| 89762-1323 | | | 381.00 / 15.00 | | 2.0 |
| 89762-1324 | | | 457.20 / 18.00 | | 2.4 |
| 89762-1370 | SMA ST Plug to SMA ST Plug | 141 Ultra-Low-Loss | 152.40 / 6.00 | 1.35 max. to 26 GHz | 0.4 |
| 89762-1371 | | | 304.80 / 12.00 | | 0.70 |
| 89762-1400 | SMA ST Plug to SMP ST Jack | 086 Ultra-Low-Loss | 152.40 / 6.00 | 1.50 max. to 26 GHz | 0.70 |
| 89762-1401 | | | 228.60 / 9.00 | | 1.07 |
| 89762-1402 | | | 304.80 / 12.00 | | 1.45 |
| 89762-1420 | SMP ST Jack to SMP ST Jack | 086 Ultra-Low-Loss | 152.40 / 6.00 | 1.70 max. to 40 GHz | 1.15 |
| 89762-1421 | | | 228.60 / 9.00 | | 1.50 |
| 89762-1422 | | | 304.80 / 12.0 | | 1.80 |
| 73419-8310 | SMA ST Plug to SMA ST Plug | 210 Ultra-Low-Loss | 914.4 / 36 | 1.50 max. to 18 GHz | 1.35 |
| 73419-8311 | | | 1828.8 / 72 | | 2.55 |
| 73419-8320 | N ST Plug to N ST Plug | 310 Ultra-Low-Loss | 914.4 / 36 | 1.60 max. to 11 GHz | 1.2 |
| 73419-8321 | | | 1828.8 / 72 | | 1.8 |

Ordering Information

Temp-Flex Solid-Core Low-Loss cables

| Order No. | Connector-to-Connector | Cable Type | Length (mm/inches) | Voltage Standing Wave Ratio (VSWR) | Insertion Loss (dB) |
|------------|----------------------------------|--------------|--------------------|------------------------------------|---------------------|
| 89762-1540 | 2.92mm ST Plug to 2.92mm ST Plug | 086 Low-Loss | 152.40 / 6.00 | 1.50 max. to 40 GHz | 1.00 |
| 89762-1541 | | | 228.60 / 9.00 | | 1.43 |
| 89762-1542 | | | 304.80 / 12.00 | | 1.85 |
| 89762-1543 | | | 381.00 / 15.00 | | 2.15 |
| 89762-1544 | | | 457.20 / 18.00 | | 2.85 |
| 89762-1580 | 2.92mm ST Plug to 2.92mm ST Plug | 047 Low-Loss | 152.40 / 6.00 | 1.55 max. to 40 GHz | 1.65 |
| 89762-1581 | | | 228.60 / 9.00 | | 2.30 |
| 89762-1582 | | | 304.80 / 12.00 | | 2.90 |
| 89762-1583 | | | 381.00 / 15.00 | | 3.60 |
| 89762-1584 | | | 457.20 / 18.00 | | 4.20 |

www.molex.com/link/flexiblemicrowavecables.html

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