TFlex®

ISO 9001 Certified

Flexible Alternative to Semirigid Coax for Military and Commercial Applications including, Low Loss Microwave and Wireless Base Station Interconnects.

Developed over ten years ago as a lighter weight, flexible alternative to semirigid coax, TFlex® has been widely adopted for both military and commercial communication systems. Its Teflon FEP jacket provides excellent protection in corrosive environments and its flexible nature eliminates the need for hand or precision machine bending. Following the most convenient routing, TFlex® can be preterminated to its desired length and can then be just "plugged in".

Features & Benefits:

- Meets all MIL-C-17 Requirements
- Excellent Shielding Effectiveness
- Low Passive Intermod (PIM)
- Stable Loss, Phase and VSWR vs. Flexing
- Uses Standard Solder-on Semirigid Connectors

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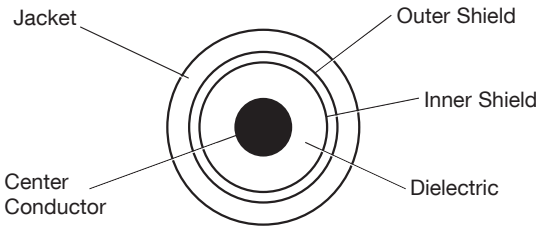
TFlex® Specifications:



Construction

Center Conductor: Solid Silver- Plated Copper (TFlex-047 & TFlex-405 is SCCS)

Dielectric: Solid PTFE

Inner Shield: Silver-Plated Copper Flat Ribbon Tape

Outer Shield: Silver-plated Copper Braid

Jacket: Blue Teflon FEP

Benefits

The use of a silver plated outer conductor RF path minimizes the potential for intermodulation distortion. In addition to its electrical benefits, TFlex enables designers and installers to make simple "plug-in" cable runs without the need for complex 3D bend configurations required for semirigid coax.

Connectors

Use standard solder on connectors for semi-rigid cable. TFlex cables can be purchased in bulk reels or as preterminated and tested cable assemblies.

For further information, pricing and delivery, please contact our Sales Department.

	TFlex 405	TFlex 402	TFlex 401	TFlex 047
Physical and Mechanical Specifications				
Dimensions				
Conductor	0.0201"	0.036"	0.0641"	0.0113"
Dielectric	0.064"	0.118"	0.208"	0.0370"
Shield	0.085"	.139"	0.249"	.057"
Jacket	0.104"	0.160"	0.270"	.074"
Minimum Static Bend Radius (in)	.250"	.500"	1.125"	.125"
Weight (lbs/ft)	0.015	0.033	0.095	0.0075
Temperature Range	-65°C to +125°C			
Electrical Specifications				
Impedence	50 ohms			
Velocity %	69.5			
Capacitance pf per ft	29.3			
Shielding	>100dB			
Cutoff Frequency	60GHz	34GHz	19GHz	108.0GHz
Attenuation (dB per 100 Feet +25°)				
Frequency Styles	0.104"	0.160"	0.270"	.074"
100 MHz	6.4	3.4	2.2	12
400 MHz	13.1	7.1	4.7	24
1,000 MHz	21.1	11.6	7.8	37
2,000 MHz	31.0	17.0	12.0	53
3,000 MHz	38.0	22.0	15.0	66
10,000 MHz	75.0	45.0	33.0	124
12,000 MHz	83.0	51.0	37.0	137
13,500 MHz	89.0	55.0	41.0	145
16,000 MHz	99.0	61.0	46.0	160
18,000 MHz	106.0	66.0	50.0	170
Attenuation at Frequency	A= K1 √FMHz + K2 FMHz			
K1	.630	.330	.210	1.156
K2	.00120	.00120	.00120	.00120
Maximum CW Power Handling (Watts, +40°C, Sea Level 1:1 VSWR)				
Frequency/Size	0.104"	0.160"	0.270"	
100 MHz	401	999	2119	
400 MHz	195	480	1002	
1,000 MHz	119	290	595	
2,000 MHz	81	195	394	
3,000 MHz	65	154	306	
10,000 MHz	31	72	136	
12,000 MHz	28	63	120	
13,500 MHz	26	58	110	
16,000 MHz	23	52	97	
18,000 MHz	21	48	88	

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