

TFlex®

- Low Loss Microwave Interconnect
- Wireless Base Station Interconnect

Flexible alternative to Semirigid Coax

Features & Benefits

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



TFlex employs a thin helical wrap of silver plated copper tape and overall braid sized such that standard solder-on connectors can be used.

TFlex was developed 10 years ago and have been widely adopted by the commercial and military OEM's.

Some of the key characteristics of **TFlex** are:

Passive Intermod – typically > -150dBc (2x 20 watt carriers)

Shielding Effectiveness – comparable to standard semirigid and like semirigid is beyond measurable limits.

Small/Lightweight – same size but lighter weight than standard CL semirigid coax.

Phase Stable – the helical tape outer conductor minimizes electrical length change with temperature to yield substantial improvement over equivalent size flexible cables.

Low Loss – can achieve loss comparable to standard CL semirigid coax.

Attenuation Stability – silver plated outer conductor prevents oxidation of the conductors thereby minimizing attenuation change vs time.

Power Handling – comparable to standard CL semirigid.

Corrosion Resistance – jacketing of the cable with FEP provides excellent protection when cable is deployed in a corrosive environment.

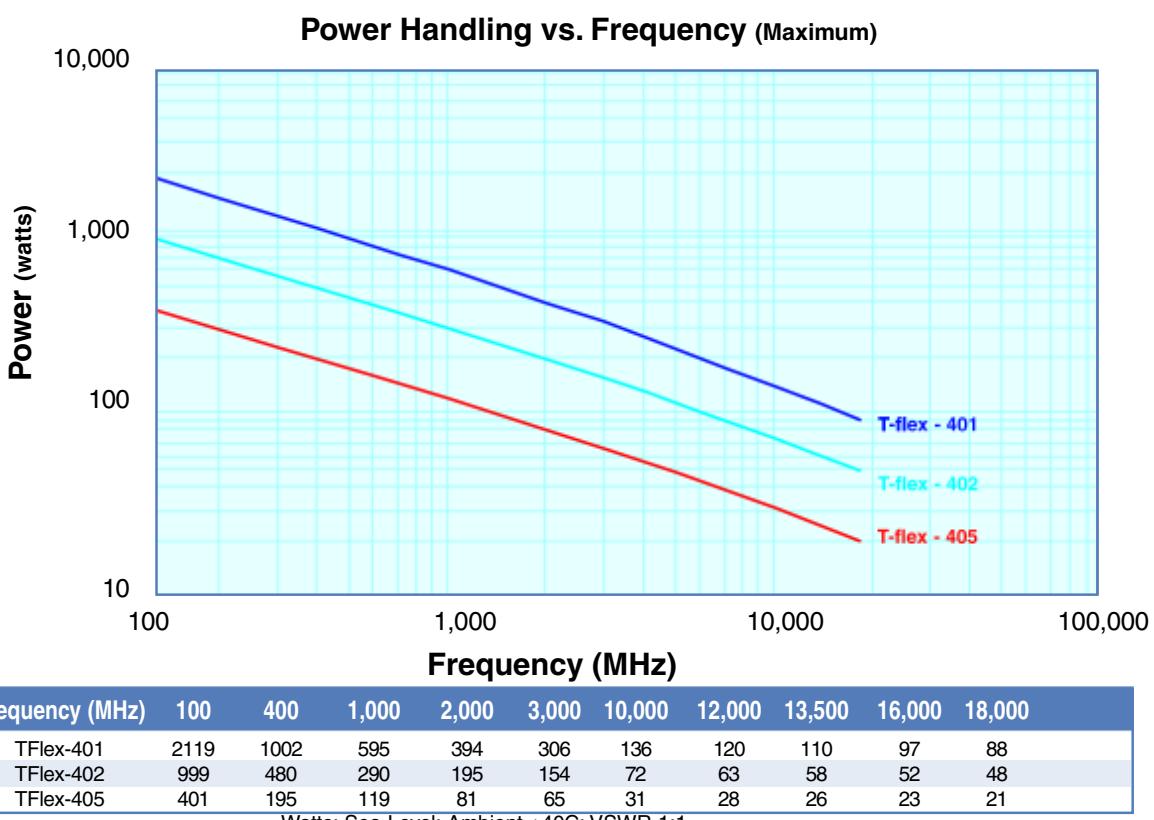
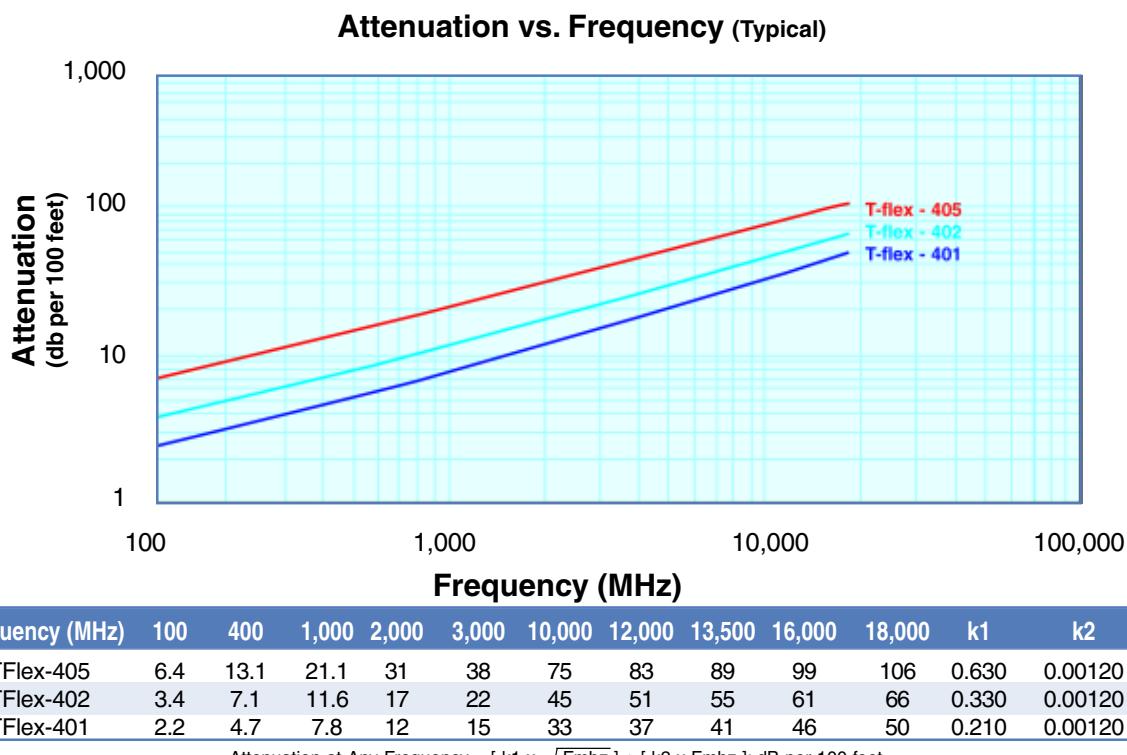
Formability – the flexible nature of **TFlex** eliminates the need for hand or precision machine bending. **TFlex** is preterminated in its approximate desired length and just 'plugged in' using the most convenient/desirable routing.

Connectors (solder-on) – are available from a variety of sources to fit standard Coppersol CL and **TFlex**.

TMS Number	Conductor inches (mm)	Dielectric inches (mm)	Shields inches (mm)	Jacket inches (mm)	Weight lbs/foot (kg/m)	Impedance ohms Vp(%)	Capacitance pF/foot (pF/m)	Max Oper. Voltage vrms	Temperature Range F (C)	Shielding Effectiveness (dB)	Minimum Bend Rad. (in)	Frequency Range Attenuation
TFlex-405 0.0201	SCCS	PTFE	SC tape+braid	Blue FEP	0.015	50 +/- 1	29.3	1,500	-85 +257	>100	0.125	.05 to 18 GHz 106 dB/100'
	(0.51)	(0.064)	(1.63)	(0.085)	(0.104)	(0.022)	(96.1)		(-65 +125)			@ 18 Ghz
TFlex-402 0.036	SC	PTFE	SC tape+braid	Blue FEP	0.033	50 +/- 1	29.3	1,900	-85 +257	>100	0.200	.05 to 18 GHz 66 dB/100'
	(0.91)	(0.118)	(3.00)	(0.141)	(0.160)	(0.049)	(96.1)		(-65 +125)			@ 18 Ghz
TFlex-401 0.0641	SC	PTFE	SC tape+braid	Blue FEP	0.095	50 +/- 1	29.3	3,000	-85 +257	>100	1.250	.05 to 18 GHz 50 dB/100'
	(1.63)	(0.208)	(5.28)	(0.249)	(0.270)	(6.9)	(0.142)	(96.1)	(-65 +125)			@ 18 Ghz



- Low Passive Intermod
- Phase Stable
- All Semirigid Coax Applications



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