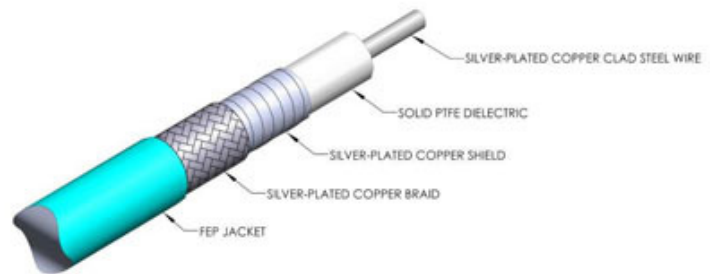


## HFE100D

M-FLEX Microwave Coaxial Cables are a family of flexible cables designed to accept connectors designed for semi-rigid cable. Unlike other single or double braided "RG" type flexible cables, M-FLEX cables are true microwave cables capable of operating to frequencies of 26.5 GHz.



### MATERIALS HFE100D

<b>Cable Part Number</b>	HFE100D	
<b>Center Conductor Material</b>	SPCW	
<b>Dielectric Material</b>	Solid PTFE	
<b>Inner Shield Material</b>	SPC	
<b>Outer Shield Material</b>	SPC	
<b>Jacket Material</b>	FEP	

### MECHANICAL CHARACTERISTICS

<b>Outer Diameter</b>	In	0.100
	mm	2.54
<b>Center Conductor Type</b>		Solid
<b>Weight</b>	g / ft	6.5
	g / m	21.3
<b>Minimum Bend Radius</b>	In	0.25
	mm	6.35

### ENVIRONMENTAL CHARACTERISTICS

<b>Temperature Range (Deg C)</b>		-65/+165
<b>Radiation (Mrads)</b>		30.0

### ELECTRICAL CHARACTERISTICS

<b>Impedance (ohms)</b>		50
<b>Frequency Range (GHz)</b>		DC-40
<b>Velocity of Propagation</b>		71%
<b>Capacitance</b>	pF / ft	29.1
	pF / m	95.5
<b>Shielding Effectiveness (dB @ 1 GHz)</b>		>100
<b>Maximum Insertion Loss (dB / ft)</b>	1 GHz	0.21
	10 GHz	0.72
	18 GHz	1.01
	26.5 GHz	N/A
	40 GHz	N/A
	50 GHz	N/A
<b>Maximum Insertion Loss (dB / m)</b>	1 GHz	0.69
	10 GHz	2.36
	18 GHz	3.31
	26.5 GHz	4.13
	40 GHz	4.13
	50 GHz	N/A
<b>Phase Stability vs. Flexure (10 GHz)</b>	Degrees	2.0
<b>Phase Stability vs. Flexure (18 GHz)</b>	Degrees	3.0