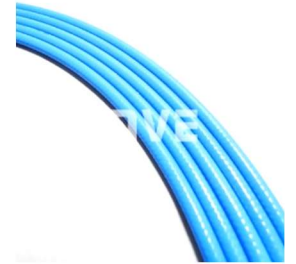




MVE Low Loss Flexible Phase stable Coax Cable

MCBL-F141X.50



Specifications

Features:

- PTFE Tape + SPC Foil
- Excellent Temp Phase Stable
- Equivalent to TFLEX402.SS402
- Replace to Multi-Flex 141,MultiBend 141

Applications:

- Field Installation, Test and Calibration
- Research and Development Labs
Airborne Platform

CONSTRUCTION

ITEM	MATERIAL	DIAMETER(mm)	Tolerance(mm)
INNER CONDUCTOR	Silver Plated Copper	0.91	±0.02
DIELECTRIC	PTFE	3.00	±0.05
OUTER CONDUCTOR	Silver-plated Copper Foil	3.20	±0.05
INNER LAYER	--	--	--
OUTER SHEILD	Silver-plated Copper	3.55	3.70 Max
JACKET	FEP (Blue)	4.00	±0.10

ELECTRICAL DATA

MIN. BEND RADIUS :Installation	20mm
MIN. BEND RADIUS: Repeated	40mm
WEIGHT (g/m)	49
OPERATING TEMP	-55°C ~ +125°C
TEMP STORAGE	-65°C ~ +125°C

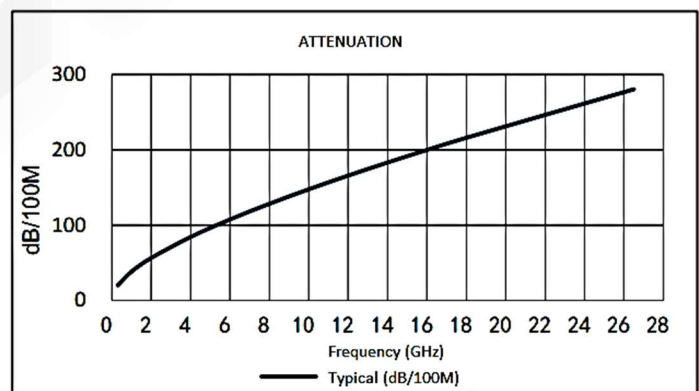
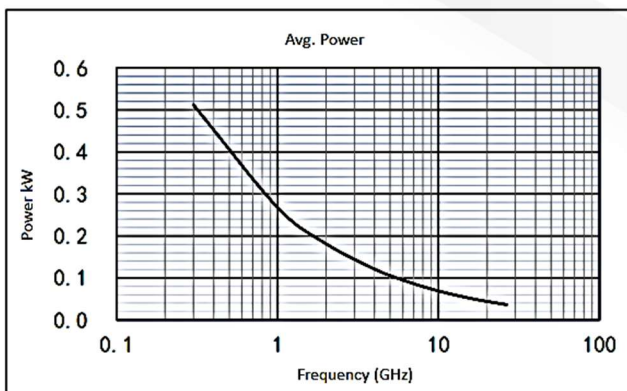
MECHANICAL DATA

FREQUENCY	26.5GHz
IMPEDANCE	50 Ohm
VELOCITY OF PROPAGATION	70.0 %
SHIELDING EFFECT	90 dB
VOLTAGE WITHSTAND	1000 V.DC

TYP. ATTENUATION(25°C) and TYP. AVG. POWER (40°C)

Freq.(GHz)	0.3	1	2	4	6	8	10	12	14	16	18	26.5
dB/100m	19.9	38.2	56.3	84.2	107.5	128.3	147.6	165.8	183.2	199.9	216.1	280.5
Power kW	0.512	0.267	0.181	0.121	0.095	0.080	0.069	0.062	0.056	0.051	0.047	0.036

$K1= 1.0824000 \quad K2= 0.0039370 \quad \text{Equation} = K1*\sqrt{F\text{MHz}}+K2*F \text{ MHz}$





Cable Assembly Part Number

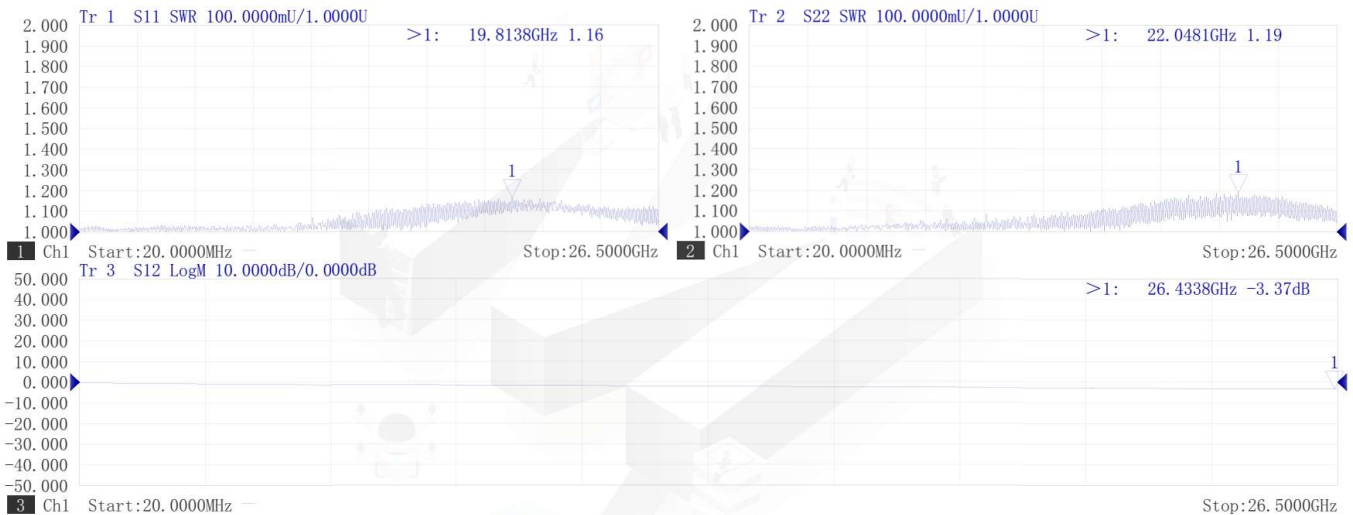
MVE PART NUMBER	CONECTOR 1	CONNECTOR 2	LENGTH (cm)	FREQUENCY (GHz)	VSWR (TYP)
160160.F141X.XX	3.5mm Male	35mm Male	90, 100, 120, 150, 200	26.5	1.30
260260.F141X.XX	N Male	N Male	90, 100, 120, 150, 200	18.0	1.30
260270.F141X.XX	N Male	N Female	90, 100, 120, 150, 200	18.0	1.40
260280.F141X.120	N Male	SMA Male	90, 100, 120, 150, 200	18.0	1.25
260290.F141X.120	N Male	SMA Female	90, 100, 120, 150, 200	18.0	1.30
260292.F141X.XX	N Male	SMA Female R/A	90, 100, 120, 150, 200	18.0	1.40
262262.F141X.XX	N Male R/A	N Male R/A	90, 100, 120, 150, 200	18.0	1.40
262280.F141X.XX	N Male R/A	SMA Male	90, 100, 120, 150, 200	18.0	1.35
280280.F141X.XX(H)	SMA Male	SMA Male	90, 100, 120, 150, 200	26.5	1.30
280280.F141X.XX	SMA Male	SMA Male	90, 100, 120, 150, 200	18.0	1.30
280290.F141X.XX	SMA Male	SMA Female	90, 100, 120, 150, 200	18.0	1.30





Typical Test Result

PART NUMBER	DESCRIPTION
160160.F141X.120	3.5mm Male To 3.5mm Male, F141X/ L:120cm DC-26.5GHz VSWR<1.30:1, I.L<3.9dB



Ch1	SweepType	Start Frequency	Stop Frequency	Points	IF BW (Hz)	SweepTime (s)	Port1, 2Power (dBm)
Ch1	LIN_SWEEP	0.020000000GHz	26.500000000GHz	1601	10000	1.000000	0.0, 0.0

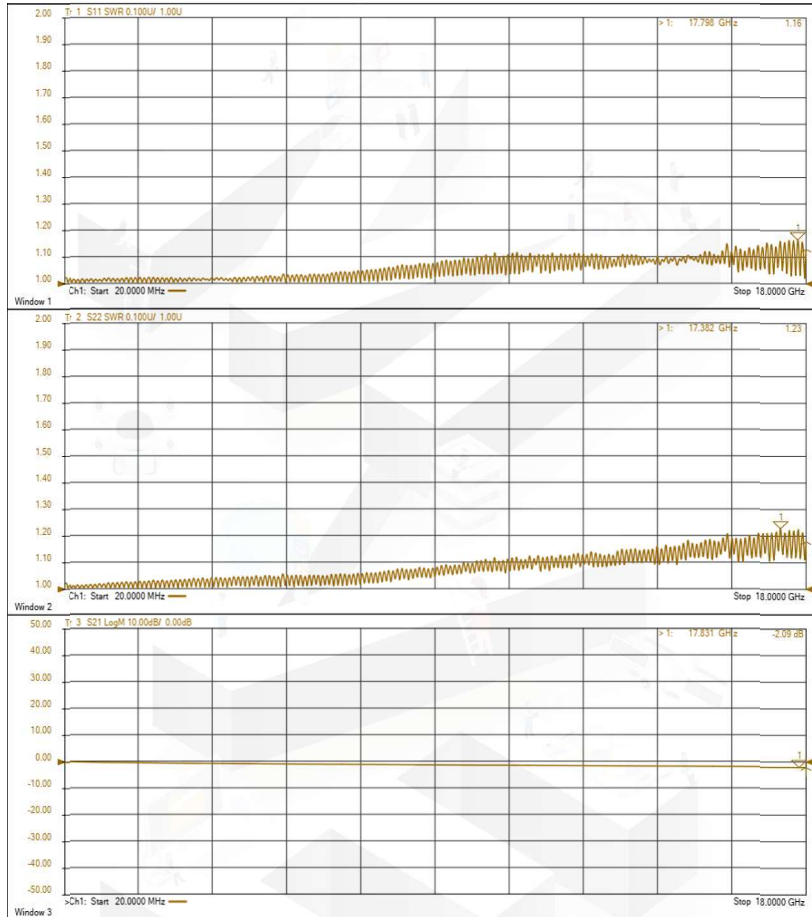
Win1	Marker	Delta	Stimulus	Response
Trace1--S11	1		19.8138GHz	1.164
Trace2--S22	1		22.0480GHz	1.189
Trace3--S12	1		26.4338GHz	-3.373dB





Typical Test Result

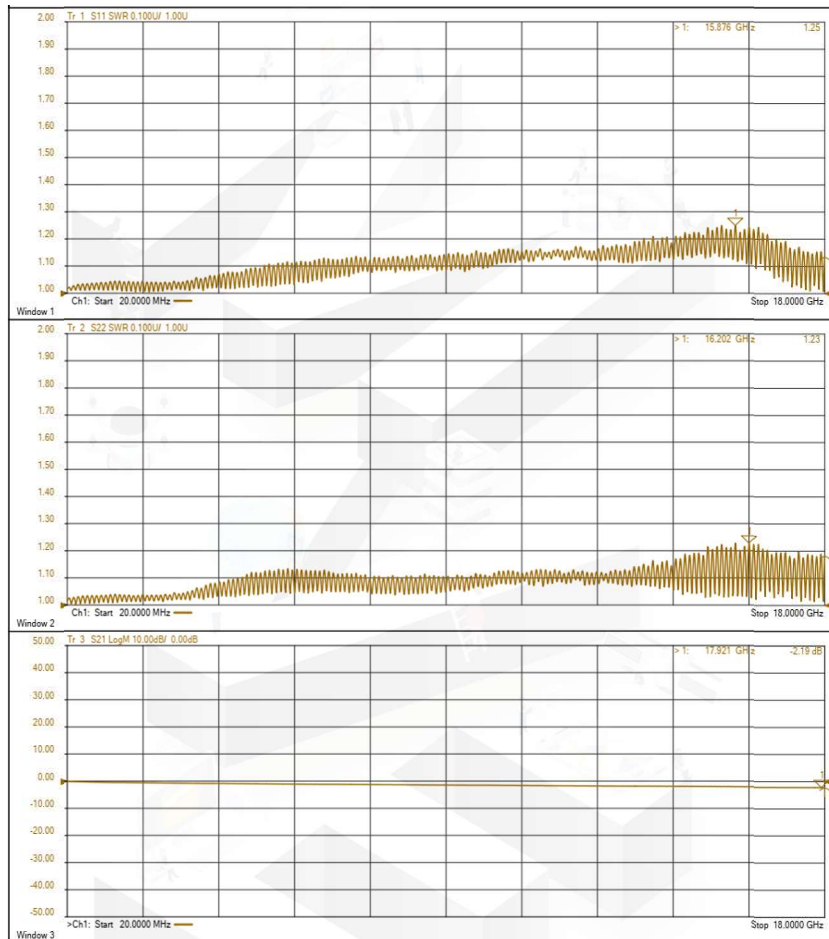
PART NUMBER	DESCRIPTION
280280.F141X.100	SMA Male To SMA Male, F141X,DC-18GHz/L:100cm





Typical Test Result

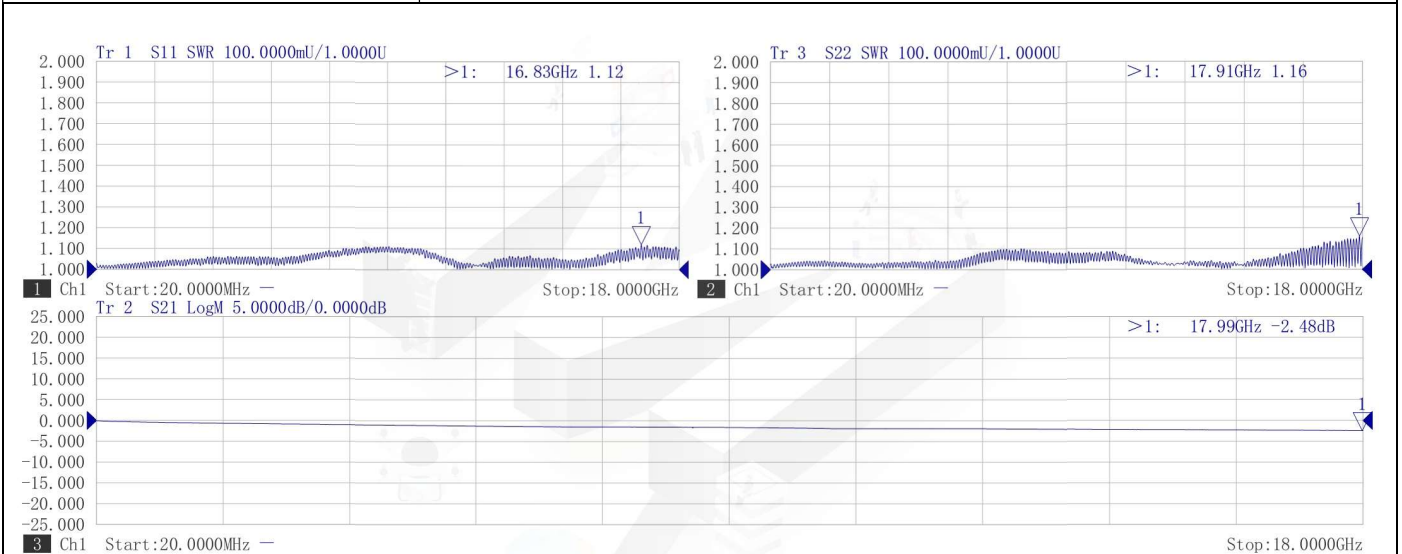
PART NUMBER	DESCRIPTION
260260.F141X.100	N Male To N Male, F141X, DC-18GHz/L:100cm





Typical Test Result

PART NUMBER	DESCRIPTION
260280.F141X.120	N Male To SMA Male, F141X, /L:120cm DC-18GHz VSWR<1.25:1, I.L.<2.93dB



Ch1	SweepType	Start Frequency	Stop Frequency	Points	IF BW (Hz)	SweepTime (s)	Port1, 2Power (dBm)
Ch1	LIN_SWEEP	0.020000000GHz	18.000000000GHz	1601	10000	1.000000	0.0, 0.0

Win1	Marker	Delta	Stimulus	Response
Trace1--S11	1		16.8313GHz	1.120
Trace3--S22	1		17.9101GHz	1.160
Trace2--S21	1		17.9887GHz	-2.483dB





Typical Test Result

PART NUMBER	DESCRIPTION
262280.F141X.100	N Male R/A To SMA Male, F141X, DC-18GHz/L:100cm

