

# MVE Low Loss Flexible

# 50GHz Interconnect Cables

## MCBL-LL407.50



### Features

- Ultra Low Loss, Excellent Temp Phase Stable
- 83%Vp PTFE Tape + SPC Foil
- Equivalent to cnx3507
- Replace to UFB142A, HF130,IW1401

### Applications

- Interconnect System
- Wireless
- Rotary Joint
- Antenna Seeker

### Specifications

#### CONSTRUCTION

ITEM	MATERIAL	DIAMETER(mm)	Tolerance(mm)
INNER CONDUCTOR	Silver Plated Copper	0.91	±0.03
DIELECTRIC	LD PTFE	2.48	--
OUTER CONDUCTOR	Silver-plated Copper Foil	2.72	2.75 Max
INNER LAYER	--	2.90	--
OUTER SHEILD	Silver-plated Copper	3.30	--
JACKET	FEP (Clean / Orange)	3.80	±0.10

#### ELECTRICAL DATA

MIN. BEND RADIUS :Installation	18mm
MIN. BEND RADIUS: Repeated	36mm
WEIGHT (g/m)	35
OPERATING TEMP	-55°C ~ +200°C
TEMP STORAGE	-65°C ~ +200°C

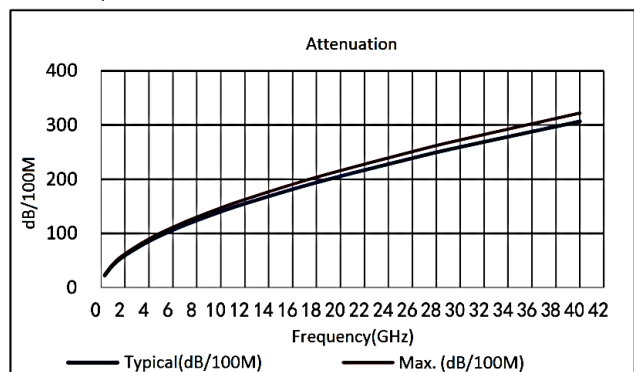
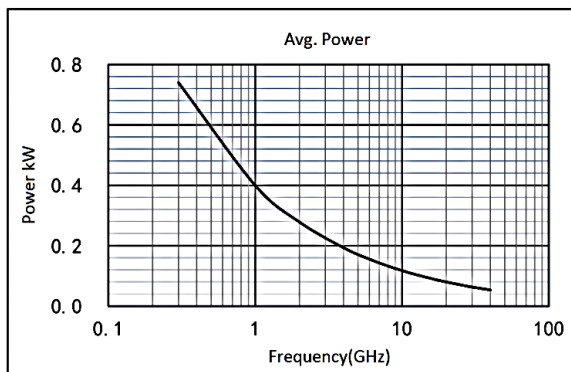
#### MECHANICAL DATA

FREQUENCY	40 GHz
IMPEDANCE	50 Ohm
VELOCITY OF PROPAGATION	83 %
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	18	26.5	30	40
<b>dB/100m</b>	22.33	41.37	59.29	85.42	106.10	123.96	140.01	154.77	193.99	241.64	259.53	306.88
<b>Power kW</b>	0.740	0.399	0.279	0.193	0.156	0.133	0.118	0.107	0.085	0.068	0.064	0.054

$$K1 = 1.2657000 \quad K2 = 0.0013435 \quad \text{Equation} = K1 * \sqrt{FMHz} + K2 * FMHz$$





### Cable Assembly Part Number

MVE PART NUMBER	CONNECTOR 1	CONNECTOR 2	LENGTH(cm)	Operating Frequency (GHz)	VSWR
130160.LL407.100	2.4mm FEMALE	3.5mm MALE	100	26.50	1.30
140140.LL407.30	2.92mm MALE	2.92mm MALE	30	40.00	1.30
140140.LL407.60	2.92mm MALE	2.92mm MALE	60	40.00	1.30
140140.LL407.100	2.92mm MALE	2.92mm MALE	100	40.00	1.30
140140.LL407.150	2.92mm MALE	2.92mm MALE	150	40.00	1.30
140140.LL407.200	2.92mm MALE	2.92mm MALE	200	40.00	1.30
140140.LL407.500	2.92mm MALE	2.92mm MALE	500	40.00	1.30
150150.LL407.40	2.92mm FEMALE	2.92mm FEMALE	40	40.00	1.30
280280.LL407.60	SMA MALE S/T	SMA MALE S/T	60	26.50	1.30
280280.LL407.100	SMA MALE S/T	SMA MALE S/T	100	26.50	1.30
280280.LL407.150	SMA MALE S/T	SMA MALE S/T	150	26.50	1.30
280280.LL407.200	SMA MALE S/T	SMA MALE S/T	200	26.50	1.30
280280.LL407.500	SMA MALE S/T	SMA MALE S/T	500	26.50	1.30

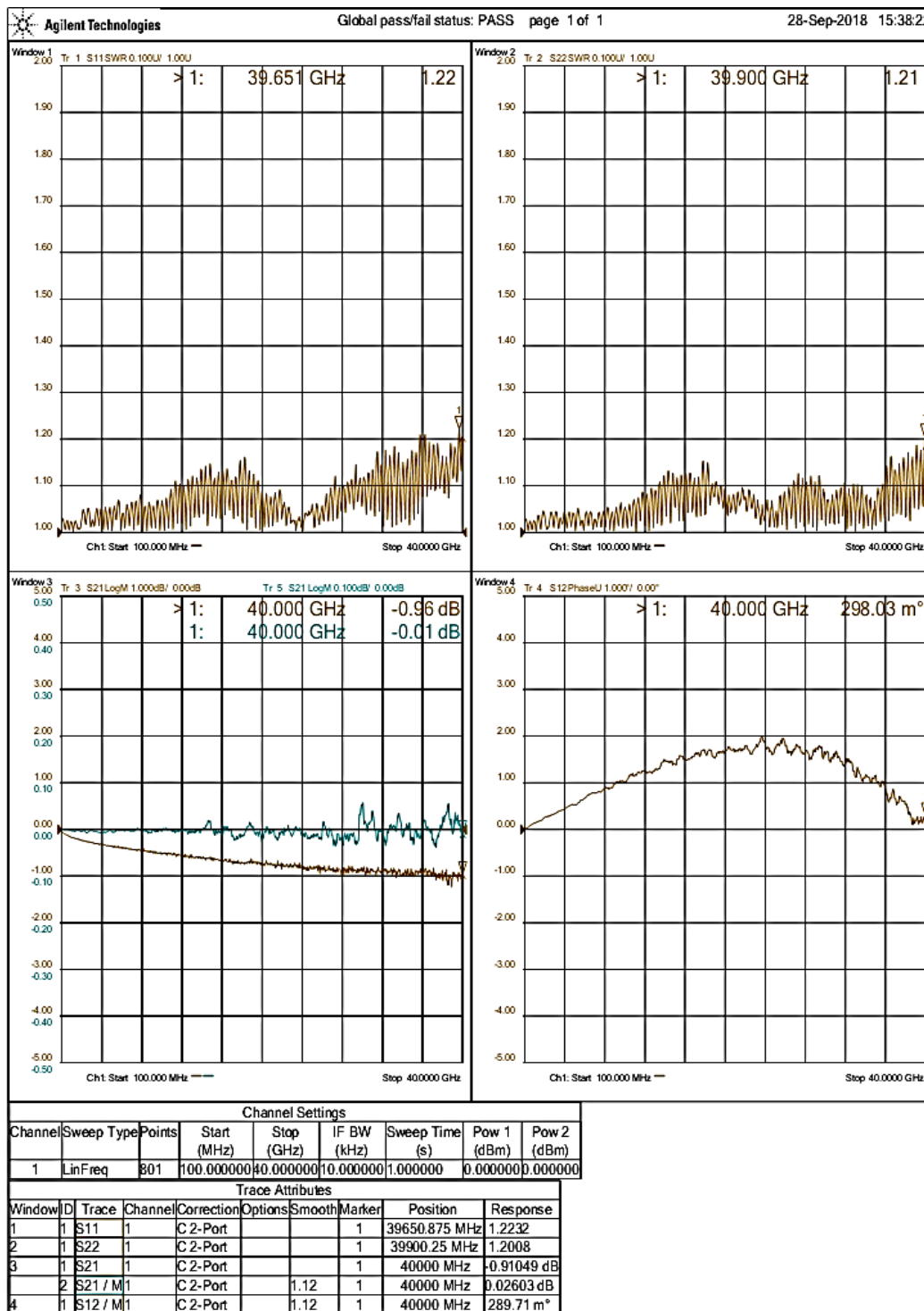
NOTES:

1. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME
2. CUSTOMER OUTLINE DRAWING FOR REFERENCE ONLY



## Typical Test Result

PART NUMBER	DESCRIPTION
140140.LL407.30	2.92mm Male To 2.92mm Male, DC-40GHz LL407 ((Phase $\leq 6^\circ$ , Delay $\leq 4.02\text{nS/m}$ , Loss stability $\leq \pm 0.1\text{dB}$ ) Cable/L:30cm



PART NUMBER	DESCRIPTION
140140.LL407.200	2.92mm Male To 2.92mm Male, DC-40GHz LL407 Cable (Phase $\leq 6^\pm$ , Delay $\leq 4.02\text{nS/m}$ , Loss stability $\leq \pm 0.1\text{dB}$ )/L:200cm

