

# MVE Low Loss Flexible

## MCBL-LL670.50

## MCBL-LL670P.50\*Phase Stable

# 67GHz Coax Test Cable



### Features:

- FREQUENCY: 67GHz
- High Flexibility
- Phase & Loss Stable
- High Matching Cycles, Stainless Steel Connectors
- Full Armor solutions

### Applications:

- RF&Microwave Test and Calibration
- Research and Development Labs
- Interconnect RF Equipment in Narrow Environment
- Military / Commercial Communication Systems Interconnect

### Specifications

CONSTRUCTION		
ITEM	MATERIAL	DIAMETER
CENTER CONDUCTOR	Silver Plated Copper	0.50 ±0.02mm
DIELECTRIC	LD PTFE	1.38mm
OUTER CONDUCTOR	Silver-plated Copper Foil	1.54mm
OUTER SHIELDING	Silver Plated Copper	1.89mm
JACKET	FEP	6.00±0.2mm

ELECTRICAL DATA	
ITEM	SPECIFICATION
FREQUENCY	67GHz
CHARACTERISTIC IMPEDANCE	50 Ohm
BEND RADIUS(mm)	22mm MIN. (Repetition)
OPERATING TEMP	-55°C~ +125°C
SHIELDING EFFECTIVENESS	Typically <-90 dB
VOLTAGE WITHSTAND (V,DC)	400
VELOCITY OF PROPAGATION	82.0 %
*OPTION-P (PASHÉ STABILITY)	±10° ~±15° TYP. (P/N# MCBL-LL670P.50)

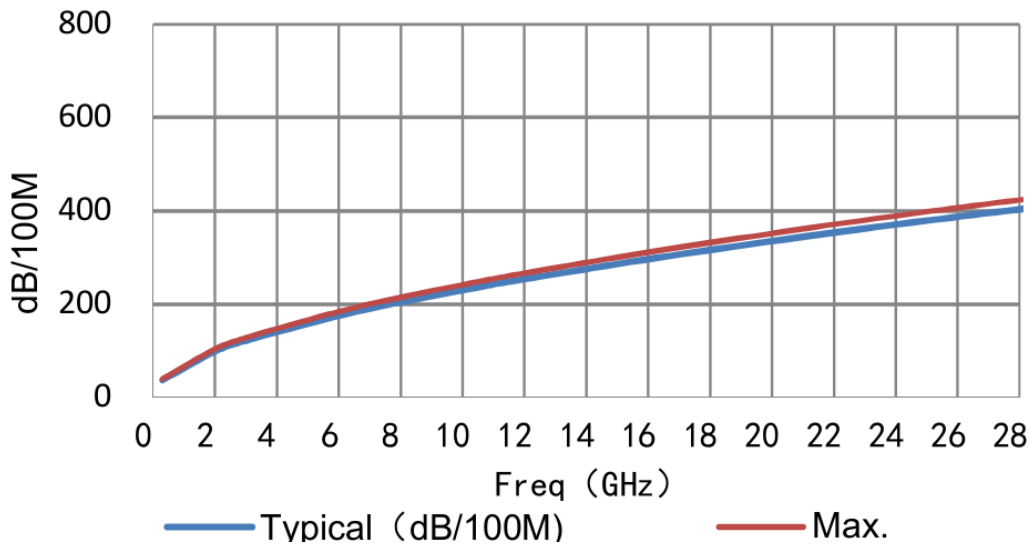
TYP. ATTENUATION(25°C) and TYP. AVG. POWER (40°C)												
Freq.(GHz)	0.3	2	3	6	8	10	12	18	26.5	40	50	67
dB/100m	37.5	98.8	121.9	175.3	204.2	230.1	253.8	316.3	391.4	493.2	560.1	663.4
Power kW	0.178	0.068	0.055	0.038	0.033	0.029	0.026	0.021	0.017	0.014	0.012	0.010

$$K1 = 2.1358324$$

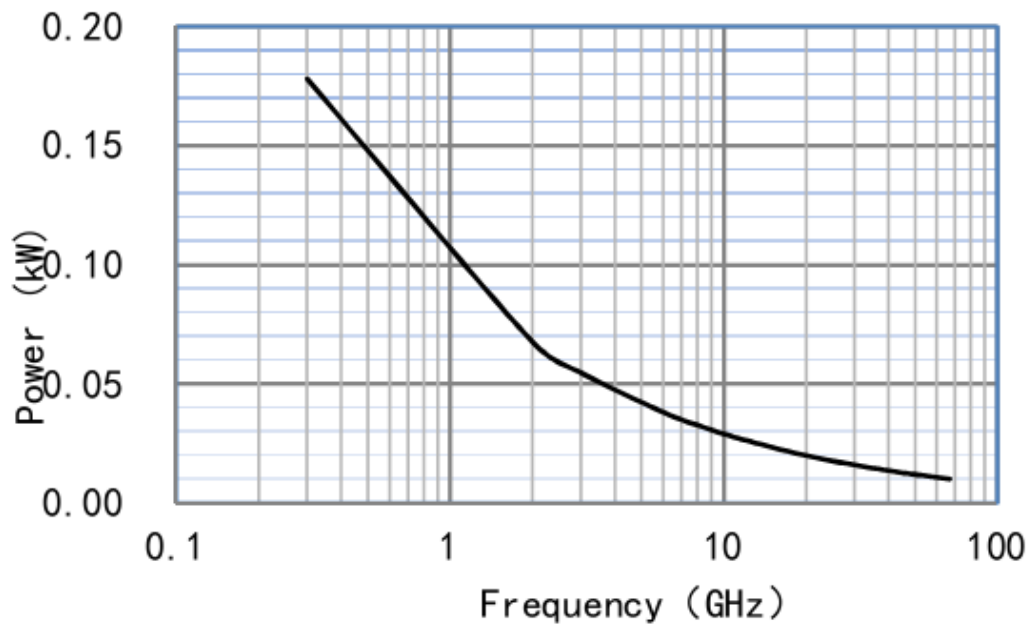
$$K2 = 0.0016507$$

$$\text{Equation} = K1 \cdot \sqrt{\text{FMHz}} + K2 \cdot \text{FMHz}$$

### Cable Attenuation



### Average Power





## Cable Assembly Part Number

MVE PART NUMBER	CONNECTOR 1	CONNECTOR 2	LENGTH (cm)	FREQUENCY (GHz)	VSWR
100100.LL670.XX	1.85mm Male	1.85mm Male	15, 30, 50, 60, 90, 100	67.0	1.40
100110.LL670.XX	1.85mm Male	1.85mm Female	15, 30, 50, 60, 90, 100	67.0	1.40
110110.LL670.XX	1.85mm Female	1.85mm Female	15, 30, 50, 60, 90, 100	67.0	1.40

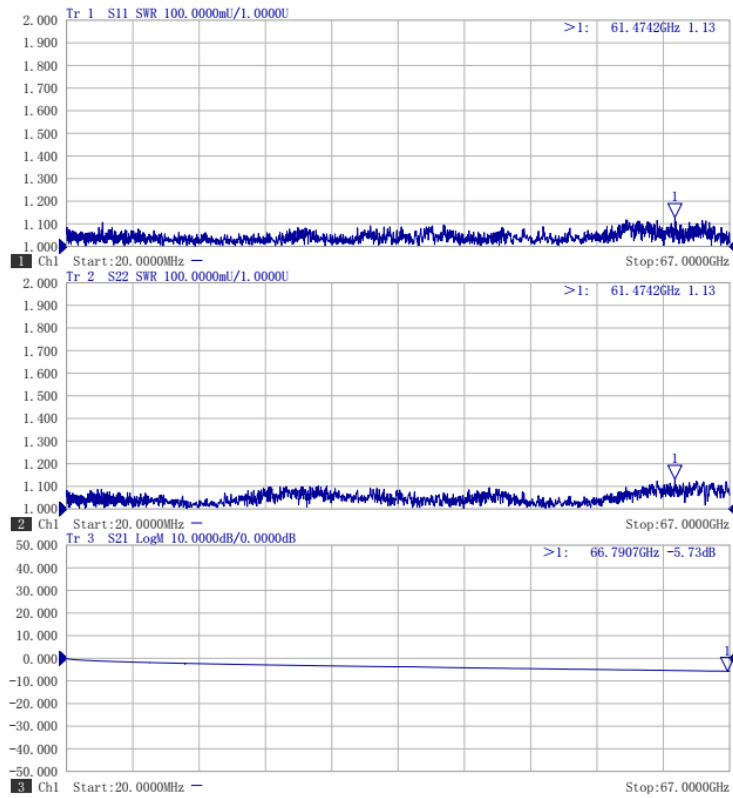
NOTES:

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

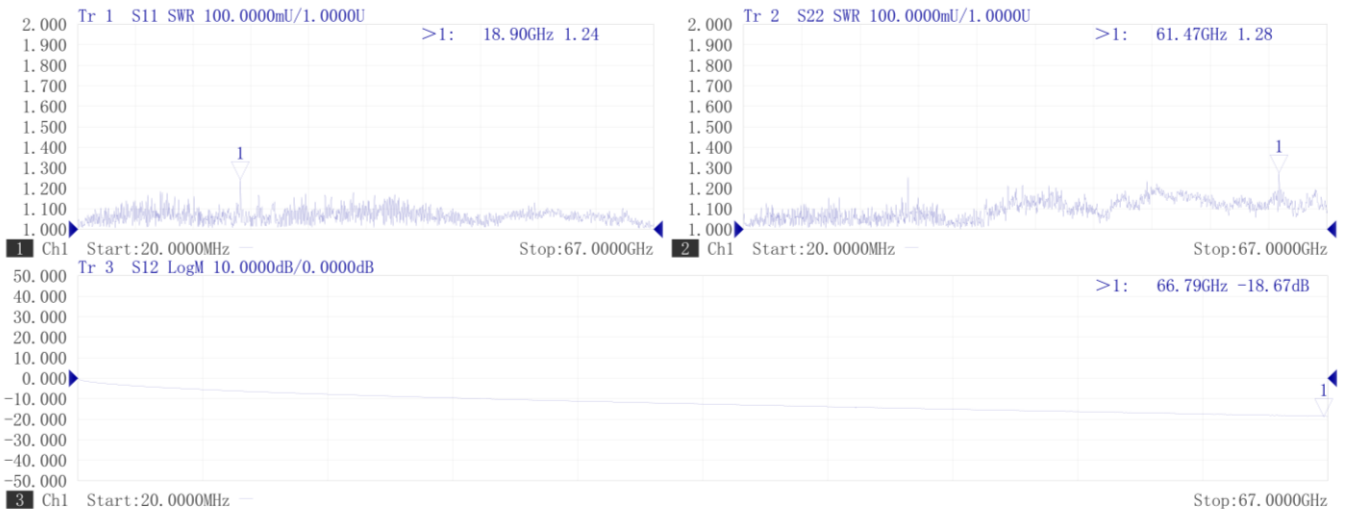


## Typical Test Result

PART NUMBER	DESCRIPTION
100100.LL670.100	1.85mm Male/Stainless To 1.85mm Male/Stainless,LL670/L:100cm DC-67GHz Low Loss, Phase Stable Cable(with Armor)



PART NUMBER	DESCRIPTION
100110.LL670.300	1.85mm Male To 1.85mm Female, LL670/L:300cm DC-67GHz Low Loss, Phase Stable Cable(with Armor) VSWR<1.4 / I.L.<21dB



Ch1	SweepType	Start Frequency	Stop Frequency	Points	IF BW(Hz)	SweepTime (s)	Port1, 2Power (dBm)
Ch1	LIN_SWEEP	0.020000000GHz	67.000000000GHz	1601	10000	1.000000	0.0, 0.0

Win1	Marker	Delta	Stimulus	Response
Trace1--S11	1		18.8999GHz	1.243
Win2				
Trace2--S22	1		61.4741GHz	1.276
Win3				
Trace3--S12	1		66.7906GHz	-18.670dB



PART NUMBER	DESCRIPTION
110110.LL670.50	1.85mm Female To 1.85mm Female, LL670/L:50cm DC-67GHz Low Loss, Phase Stable Cable(with Armor)

