

Product Specifications

FMUSER INTERNATIONAL GROUP LIMITED WWW.FMUSER.NET

Construction

Inner conductor	Helix corrugated copper tube	34.7 mm
Dielectric	PE Strip	75.2 mm
Outer conductor	Helix corrugated copper tube	85.4 mm
Jacket	Resistance of heat & light PE, Black	91.0 mm

Mechanical Characteristics

Weight	3540kg/km
Minimum bending radius	
• single bending	380 mm
• repeated bending (15times)	1100 mm
Operating temperature range	-45 ~ +85 °C

Electrical Characteristics

Characteristics impedance	50 ± 0.5Ω
Velocity	96%
Capacitance	70 pF/m
Max. Operating frequency	1.55 GHz
Cut-off frequency	1.66 GHz
DC breakdown voltage	9.7 kV
Peak power rating	940 kW
DC-resistance	
• inner conductor	0.40 Ω/km
• outer conductor	0.12 Ω/km



Attenuation

Frequency MHz	Attenuation dB/100 m	Average Power kW	Frequency MHz	Attenuation dB/100 m	Average Power kW
0.5	0.025	790.0	30	0.19	80.00
1	0.035	560.0	100	0.37	43.00
1.6	0.044	440.0	200	0.52	30.00
3	0.060	320.0	500	0.85	18.50
6	0.086	227.0	800	1.01	14.40
10	0.111	176.0	1000	1.26	12.70
20	0.158	124.0			

Attenuation, ambient temperature 20 °C; Average power, ambient temperature 40 °C;
inner conductor temperature 200 °C.

Working Frequency:

Peak power rating	Wave band	Frequency (Channel)	Transmitter
≤50 kW	Medium Wave	550 ~ 1600 kHz	Broadcast Transmitter
≤10 kW	FM	88 ~ 108 MHz	FM Transmitter
≤10 kW	M. Wave & Dm. Wave	1 CH ~ 68 CH	TV Transmitter

- Practical operating power rating depends on the ambient environment and conditions;
- Low attenuation & VSWR transmission line used for mobile communication system, microwave relay communication, satellite earth station, radar, etc.