

FR1500U

Low Loss, Ultra Flexible

Features:

- * Low Insertion Loss
- * High Weatherability
- * UV Resistant
- * Ultra Flexible

Applications:

- * Wireless Communication
- * Microwave Interconnect

Electrical

Frequency:	DC~2GHz
Cut-off Frequency:	10GHz
Impedance:	50Ω
Velocity of Propagation:	87%
Shielding Effectiveness:	90dB min.
Voltage Withstand:	4000V DC

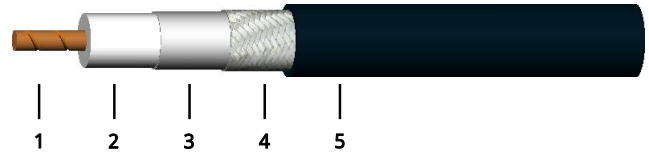
Mechanical

Bend Radius (installation):	40.0mm
Bend Radius (repeated):	80.0mm
Weight:	250g/m

Environmental

Temperature:	-40~+85°C
Outdoor Life:	20 years

Construction



No.	Name	Size (mm)	Material
1	Inner Conductor	4.47	Stranded Copper
2	Dielectric	11.56	Foam PE
3	Outer Conductor	11.71	Double-edged aluminum foil
4	Outer Shield	12.45	Tin-plated copper braid
5	Jacket	15.00	TPE

Attenuation & Power Handling

Frequency (GHz)	0.03	0.05	0.15	0.22	0.45	0.9	1.5	1.8	2
Attenuation*1 (dB/100m)	1.7	2.2	3.8	4.6	6.8	9.8	13.1	14.5	15.4
Average Power*2 (W)	4590	3540	2010	1640	1130	770	580	530	500

[1] VSWR:1.0; Ambient: +25°C (77°F)

[2] VSWR:1.0; Ambient: +40°C (104°F); Sea level

Calculate Cable Attenuation: Attenuation (dB/100m) = $0.2974409 * \sqrt{F \text{ (MHz)}} + 0.0010236 * F \text{ (MHz)}$

Calculate Connector Attenuation: Attenuation (dB) = $0.03 * \sqrt{F \text{ (GHz)}}$

How To Order

FR1500U-X-Y-Z

X: Frequency in GHz

Y: Connector type

Z: Length in meters

Examples:

To order a FR1500U cable assembly, DC-2GHz, 7/16 DIN male, 1.5 meters, specify FR1500U-2-77-1.5.

Connector naming rules:

7 - 7/16 DIN (L29) (2GHz, VSWR 1.35)

Female Connector - Add 'F' after connector name

Right Angle - Add 'R' after connector name (VSWR increase 0.1)

Mating Connector

QCS-MCB-R1500-1

SMA male, Crimping type,
Ternary alloy plated brass

QCS-MRCB-R1500-1

SMA male, Right angle,
Crimping type, Ternary
alloy plated brass & Nickel
plated brass

QCN-MCB-R1500-1

N male, Crimping type,
Ternary alloy plated brass

**QCN-MRCB-R1500-1**

N male, Right angle,
Crimping type, Nickel
plated brass
