

## 1.48 Micro Coaxial Cable

P/N: AT1MC148-1S



The 1.48 mm cable is an **ultra-miniature 50-ohm** coaxial cable designed for high-density electronic packaging and wireless communication modules. Due to its slightly larger diameter relative to other micro-coax cables, it offers lower attenuation and improved power handling, making it a frequent choice for **M.2 wireless cards, high-performance IoT gateways, and internal RF jumpers** in medical and industrial handhelds. It is typically terminated with **IPEX (MHF) or U.FL** connectors and features a heat-resistant **FEP jacket**, ensuring it maintains its electrical properties even when routed near heat-generating components like CPUs or power amplifiers.

### Construction Specifications

Description	Material & Plating	Diameter (mm)
Centre Conductor	Silver plated Copper clad steel	7*0.102/0.31
Dielectric	FEP	0.86±0.03
Outer Conductor	Silver plated Copper Braid	16*5/0.05(91%)
Jacket	FEP	1.48±0.05

### Electrical Specifications

Parameter	Value	Unit
Frequency Range	DC-6	GHz
Impedance	50±3	Ω
Propagation Velocity	69.5	%
Capacitance	95.8	pF/m
Screening Effectiveness	100	dB
Insulation Resistance	3000	MΩ-Km
Inner Conductor Resistance	838	Ω/km
Outer Conductor Resistance	55	Ω/km
Operating Voltage (at sea level)	≤ 60	V AC
Peak Power Rating	0.4	KW



## Technical Data Sheet

### Mechanical Specifications

Parameter	Value	Unit
Weight	4.5	Kg/km
Single Bending Radius	≥ 9	mm
Repeated Bending Radius	≥ 15	mm

### Environmental Specifications

Parameter	Value	Unit
Operation Temperature	-55 ~ 200	°C
Installation Temperature	-40 ~ 80	°C

### Attenuation

Frequency (GHz)	dB/m
1.0	1.6
1.8	2.6
2.4	2.9
5.2	4.5
6.0	4.9