Electro Optical Components, Inc.
5464 Skylane Boulevard, Suite D, Santa Rosa, CA 95403
Toll Free: 855-EOC-6300
www.eoc-inc.com | info@eoc-inc.com

Click to go to Product Selector

Datasheet CAB-HF1

High Performance Coaxial Cable

Features

- **Minimizes grounding (ground loop) related noise**
- **Double shielded coaxial design, screening effectiveness ≥ 85 dB**
- **100 % tested RF parameters Return Loss (RL) and Insertion Loss (IL)**
- **Assembled with high quality connectors**

Applications

- **General purpose current, voltage and charge measurements**
- **For use with FEMTO low noise amplifiers at input and output (see our CAB-LN1 cable for input of high gain transimpedance amplifiers)**

Specifications

	Test conditions	T_A = 25 °C, sea level
Electrical	Impedance	50 Ω ±1 Ω
	Capacitance	101 pF/m
	Insulation resistance	> 10^{13} Ω × m
	DC resistance, inner conductor	< 28 mΩ/m
	DC resistance, outer conductor	< 7 mΩ/m
	Recommended frequency range	DC to 4 GHz
	Signal delay	5 ns/m
	Screening effectiveness	≥ 85 dB (up to 1 GHz)
	Attenuation (nominal)	0.23 dB/m @ 300 MHz, 0.45 dB/m @ 1.0 GHz 0.78 dB/m @ 2.5 GHz
RF Characteristics (100% Tested)	Return loss (RL) @ 2.5 GHz	> 20 dB
	Insertion loss (IL) @ 2.5 GHz	< 0.26 dB (0.2 m), < 0.51 dB (0.5 m), < 0.77 dB (0.8 m), < 1.38 dB (1.5 m), < 2.67 dB (3.0 m)
Cable Design	A Inner conductor	copper wire, silver plated, Ø 0.88 mm
	B Dielectric	polyethylene (PE), Ø 2.95 mm
	C Outer conductor	copper braid 96 %, silver plated, Ø 3.6 mm
	D Outer conductor	copper braid 94 %, silver plated, Ø 4.2 mm
	E Jacket	polyvinyl chloride (PVC II) low migration, Ø 5.4 mm
		
	Length tolerance	±5 mm
General Data	Connectors	BNC plug (male) to BNC plug (male)
	Minimum bending radius	30 mm (fixed installation) 55 mm (≤ 50 repeated bendings)
	Maximum operating voltage	AC: < 46 V peak-peak, DC: < 70 V
	Temperature range connectors	–60 °C to +160 °C
	Temperature range cable	–25 °C to +85 °C
	Weight	0.2 m: 32 g (0.07 lbs), 0.5 m: 50 g (0.11 lbs), 0.8 m: 68 g (0.15 lbs), 1.5 m: 108 g (0.24 lbs), 3.0 m: 198 g (0.44 lbs)

Ordering Code

CAB-HF1-BB-020	0.2 m (0.66 ft) BNC plug (male) to BNC plug (male)
CAB-HF1-BB-050	0.5 m (1.64 ft) BNC plug (male) to BNC plug (male)
CAB-HF1-BB-080	0.8 m (2.62 ft) BNC plug (male) to BNC plug (male)
CAB-HF1-BB-150	1.5 m (4.92 ft) BNC plug (male) to BNC plug (male)
CAB-HF1-BB-300	3.0 m (9.84 ft) BNC plug (male) to BNC plug (male)