

FMCA2735/OR DATA SHEET

6G SDI 75 Ohm 1.0/2.3 Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 1855A-OR Coax

The 75 ohm 1.0/2.3 male to 75 ohm 1.0/2.3 male cable using 75 ohm 1855A-OR coax, part number FMCA2735/OR, from Fairview Microwave is in-stock and ships same day. This Fairview 1.0/2.3 to 1.0/2.3 cable assembly has a male to male gender configuration with 75 ohm flexible Belden 1855A-OR coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMCA2735/OR 1.0/2.3 male to 1.0/2.3 male cable assembly operates to 6 GHz and enables 6Gb/s data transfer rates for high resolution uncompressed video signal transmission. These products offer 4K and Ultra-HD quality signals that meet SMPTE Standard 2081-1.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

Electrical Specifications

Description	Min	Т	ур	Max	ι	Inits
Frequency Range	DC			6		GHz
VSWR				1.5:1		
Velocity of Propagation		3	32			%
Group Delay		1.2	2 [4]		ns/f	t [ns/m]
Capacitance		16.3 [[53.48]		pF/fl	t [pF/m]
Inductance		0.107	[0.35]		uH/f	t [uH/m]
DC Resistance Inner Cor	nductor	20.1	[65.94]		Ω/100	0ft [Ω/Km]
DC Resistance Outer Cor	nductor	3.7 [12.14]		Ω/100	0ft [Ω/Km]
Operating Voltage (AC)				300	\	/rms

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	6	GHz
Insertion Loss (Typ.)	0.052	0.075	0.108	0.176	0.289	dB/ft
	0.17	0.25	0.35	0.58	0.95	dB/m

Electrical Specification Notes:

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

Mechanical Specifications

Cable Assembly

Weight 0.1 lbs [45.36 g]

Cable

Cable Type Impedance Inner Conductor Type Belden 1855A-OR 75 Ohms Solid



Configuration:

- 1.0/2.3 Male
- 1.0/2.3 Male
- Belden 1855A-OR

Features:

- Max Frequency 6 GHz
- 82% Phase Velocity
- PVC Jacket
- Meets SMPTE ST 2081-1
- 6Gb/s Transmission
- Cost Effective

Applications:

- General Purpose
- Laboratory Use
- 6G-SDI, Video, and Broadband UHDTV
- Broadband Internet Delivery
- Broadcast A/V
- 4K/8K Video Equipment
- Medical Equipment Requiring High Speed Video
- HD Cameras

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





Inner Conductor Material and Plating Copper, Bare

Dielectric Type PΕ Number of Shields 1

Shield Layer 1 Aluminum Polyester Shield Layer 2 Tinned Copper PVC, Red Jacket Material

Jacket Diameter 0.159 in [4.04 mm]

Connectors

Description	Connector 1	Connector 1 Connector 2	
Туре	1.0/2.3 Male	1.0/2.3 Male	
Impedance	75 Ohms	75 Ohms	
Contact Material & Plating	Brass, Gold	Brass, Gold	
Contact Plating Spec.	10 μin minimum	10 µin minimum	
Dielectric Type	PTFE	PTFE	
Outer Cond Material & Plat	ing Brass, Gold	Brass, Gold	
Outer Cond Plating Spec.	3 µin minimum	3 µin minimum	
Body Material & Plating	Brass, Nickel	Brass, Nickel	
Body Plating Spec.	100 μin minimum	100 µin minimum	

Environmental Specifications

Temperature

Operating Range -30 to +75 deg C

Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

• Values at 25°C, sea level.

How to Order

Part Number Configuration:

FMCA2735/OR - xx uu cm = Centimeters <black> = Inches - Length

Example: FMCA2735/OR-12 = 12 inches long cable

FMCA2735/OR-100cm = 100 cm long cable

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 $6G\ SDI\ 75\ Ohm\ 1.0/2.3\ Male\ to\ 75\ Ohm\ 1.0/2.3\ Male\ Cable\ 75\ Ohm\ 1855A-OR\ Coax\ from\ Fairview\ Microwave\ has\ same\ day\ shipment\ for\ domestic\ and\ International\ orders. Our\ RF,\ microwave\ and\ millimeter\ wave\ products\ maintain\ a\ 99\%\ availability\ and\ are\ part\ of\ the\ broadest\ selection\ in\ the\ industry.$

Click the following link to obtain additional part information: 6G SDI 75 Ohm 1.0/2.3 Male to 75 Ohm 1.0/2.3 Male Cable 75 Ohm 1855A-OR Coax FMCA2735/OR

URL: https://www.fairviewmicrowave.com/6g-sdi-75-ohm-1.0-2.3-male-to-75-ohm-1.0-2.3-male-cable-75-ohm-1855a-or-coax-fmca2735-or-p.aspx







