

CBC721-DF | E15V95P04
Crossband Coupler, 698–960 MHz/1710–2170 MHz

General Specifications

Product Type	Diplexer
Product Family	CBC721
Modularity	1-Single
Includes	Mounting hardware

Electrical Specifications

Sub-module	1	1	1	1
Branch	1	1	2	2
Port Designation	698–960 MHz	698–960 MHz	1710–2170 MHz	1710–2170 MHz
License Band	APT 700 CEL 850 EDD 800 LMR 750 LMR 800 USA 700 USA 750	CEL 900 LMR 900	AWS 1700 DCS 1800 IMT 2100	PCS 1900

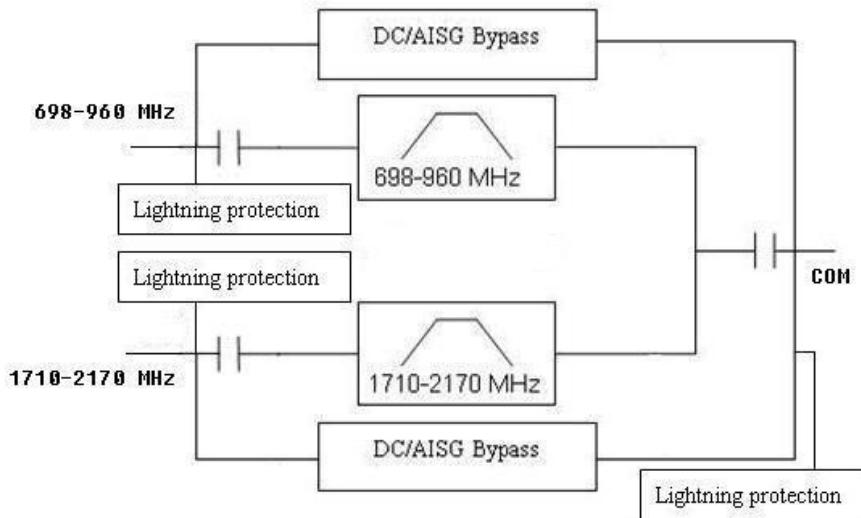
Electrical Specifications, Band Pass

Frequency Range	698–894 MHz	894–960 MHz	1710–1850 MHz 1990–2170 MHz	1850–1990 MHz
Insertion Loss, maximum	0.15 dB	0.15 dB	0.20 dB	0.20 dB
Total Group Delay, maximum	10 ns	10 ns	10 ns	10 ns
Return Loss, minimum	20 dB	20 dB	20 dB	22 dB
Return Loss, typical	24 dB			24 dB
Isolation, minimum	60 dB	60 dB	60 dB	60 dB
Input Power, RMS, maximum	500 W	500 W	500 W	500 W
Input Power, PEP, maximum	5 kW	5 kW	5 kW	5 kW
3rd Order PIM, typical	-153 dBc	-153 dBc	-153 dBc	-153 dBc
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones	2 x 20 W CW tones	2 x 20 W CW tones

dc Power/Alarm Electrical Specifications

dc/AISG Pass-through, combiner	Branch 1 Branch 2
dc/AISG Pass-through, demultiplexer	Branch 1 Branch 2
Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform

Block Diagram



Mechanical Specifications

RF Connector Interface	7-16 DIN Female
RF Connector Interface Body Style	Medium neck
Ground Screw Diameter	0.25 in
Color	Gray
Mount Type	Pole Wall
Mounting Pipe Hardware	Band clamps (2)

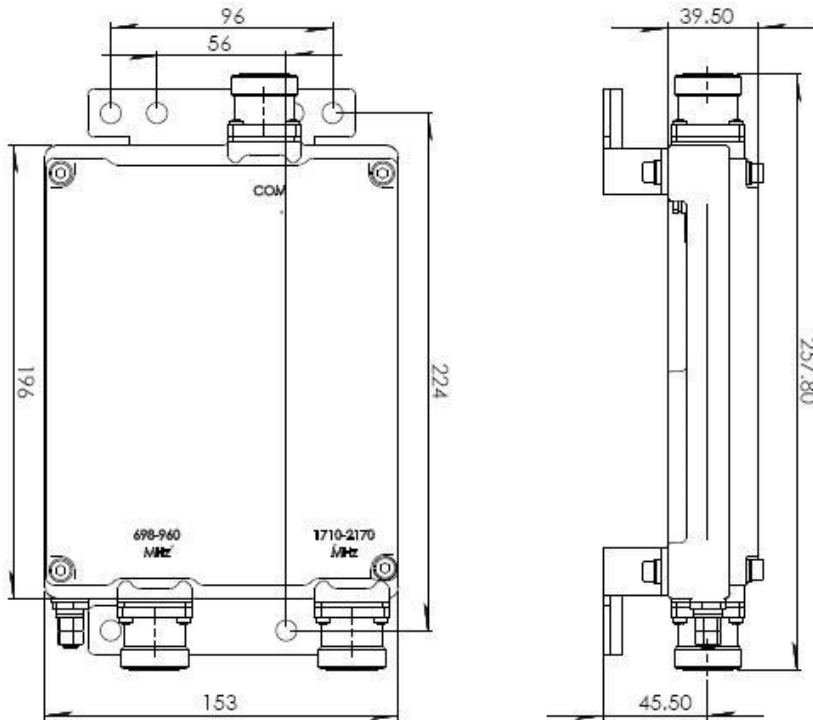
Dimensions

Height	196.0 mm 7.7 in
Width	153.0 mm 6.0 in
Depth	39.5 mm 1.6 in
Volume	1.2 L
Weight	2.0 kg 4.4 lb

Environmental Specifications

Operating Temperature	-40 °C to +65 °C (-40 °F to +149 °F)
Relative Humidity	5%–100%
Ingress Protection Test Method	IEC 60529:2001, IP67

Outline Drawing



Regulatory Compliance/Certifications

Agency	Classification
ISO 9001:2008	Designed, manufactured and/or distributed under this quality management system