

#### Diplexer, 698-894 MHz/1710-2360 MHz, dc sense

- Automatic dc switching with dc sense
- dc redundancy with dummy current sink
- Convertible mounting brackets
- Stackable to twin unit with included hardware
- BTS-to-feeder and feeder-to-antenna application

#### **OBSOLETE**

This product was discontinued on: May 20, 2019

Replaced By:

CBC426-DS-43 E14F05P30

Diplexer, 380-960 MHz/1695-2690 MHz,dc Sense,4.3-10

#### Product Classification

Product Type Diplexer

General Specifications

**Product Family** CDX723A

**Color** Gray

Common Port Label COMMON

**Modularity** 1-Single

Mounting Frame | Pole | Wall

Mounting Pipe HardwareBand clamps (2)RF Connector Interface7-16 DIN Female

**RF Connector Interface Body Style** Medium neck

**Dimensions** 

 Height
 225 mm | 8.858 in

 Width
 125 mm | 4.921 in

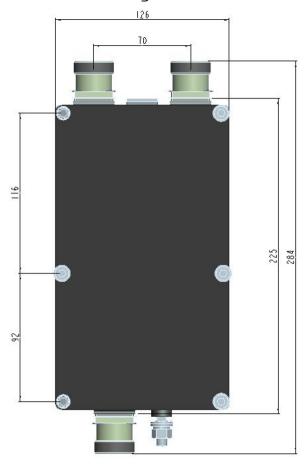
 Depth
 60 mm | 2.362 in

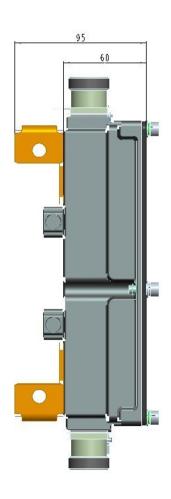
 Ground Screw Diameter
 8 mm | 0.315 in

**Mounting Pipe Diameter Range** 40–160 mm



### Outline Drawing





### **Electrical Specifications**

**Impedance** 50 ohm

**License Band, Band Pass**APT 700 | AWS 1700 | CEL 850 | DCS 1800 | EDD 800 | IMT 2100 | LMR

750 | LMR 800 | PCS 1900 | USA 700 | USA 750 | WCS 2300

### Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through, combinerdc Sensingdc/AISG Pass-through, demultiplexerBranch 2Lightning Surge Current10 kA

**Lightning Surge Current Waveform** 8/20 waveform

Operating Current at Voltage 11 mA @ 12 V | 13 mA @ 24 V

**Voltage** 7–30 Vdc

**COMMSCOPE®** 

### Electrical Specifications, AISG

AISG Carrier 2176 KHz ± 100 ppm

Insertion Loss, maximum0.5 dBReturn Loss, minimum15 dB

### **Electrical Specifications**

 Sub-module
 1
 1

 Branch
 1
 2

**Port Designation** 698-894 1710-2360

License Band

APT 700, Band Pass
CEL 850, Band Pass
EDD 800, Band Pass

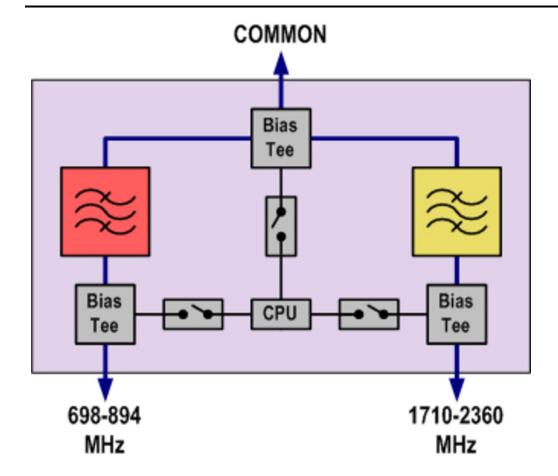
LMR 750, Band Pass LMR 800, Band Pass USA 700, Band Pass USA 750, Band Pass AWS 1700, Band Pass DCS 1800, Band Pass IMT 2100, Band Pass PCS 1900, Band Pass WCS 2300, Band Pass

### Electrical Specifications, Band Pass

Frequency Range, MHz	698-894	1710-2360
Insertion Loss, maximum, dB	0.15	0.15
Insertion Loss, typical, dB	0.1	0.1
Total Group Delay, maximum, ns	10	10
Return Loss, minimum, dB	22	22
Return Loss, typical, dB	25	25
Isolation, minimum, dB	60	60
Input Power, RMS, maximum, W	500	500
Input Power, PEP, maximum, W	5000	5000
3rd Order PIM, typical, dBc	-153	-153
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones

### Block Diagram





#### Logic Table

Combining Mode Operation (Ground Based)			
698-894 MHz	1710-2360 MHz	COMMON	DC/AISG Path Selection
Any voltage	>19 V	<7	698–894 MHz "OFF" 1710–2360 MHz to COMMON "ON"
7≤ V ≤ 30	<7 V	<7	<b>698–894 MHz "ON"</b> 1710–2360 MHz "OFF"
<7 V	7≤ V ≤ 30	<7	698–894 MHz "OFF" 1710–2360 MHz to COMMON "ON"
V<7 or V>30	V<7 or V>30	<7	ALL ports OFF

Splitting I	Splitting Mode Operation (Tower top)		]
RI	RF Ports Input Voltage		
698-894 MHz	1710-2360 MHz	COMMON	DC/AISG Path Selection
<7 V	<7 V	>7 V	698-894 MHz "OFF"
v</td <td><!-- v</td--><td>1710-2360 MHz to COMMON "ON"</td></td>	v</td <td>1710-2360 MHz to COMMON "ON"</td>		1710-2360 MHz to COMMON "ON"
7≤ V ≤ 30	<7 V	>7 V	ALL ports OFF
<7 V	7≤ V ≤ 30	>7 V	ALL ports OFF

#### **Environmental Specifications**

**Operating Temperature**  $-40 \,^{\circ}\text{C} \text{ to } +65 \,^{\circ}\text{C} \, (-40 \,^{\circ}\text{F to } +149 \,^{\circ}\text{F})$ 

**Relative Humidity** 5%-100%

Corrosion Test Method IEC 60068-2-11, 30 days

**Ingress Protection Test Method**IEC 60529:2001, IP67

Packaging and Weights

**Included** Mounting hardware

Volume 1.7 L

**Weight, net** 2.8 kg | 6.173 lb

### Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system



