CBC7823-DS | E11F33P03

Triplexer 700/850/1695-2360,DC Sense

OBSOLETE

This product was discontinued on: October 31, 2018

Replaced By:

CBC7823-DS-43 E14F60P03	Triplexer 700/850/1695-2360,dc Sense, 4.3-10

Product Classification

Product Type	Triplexer

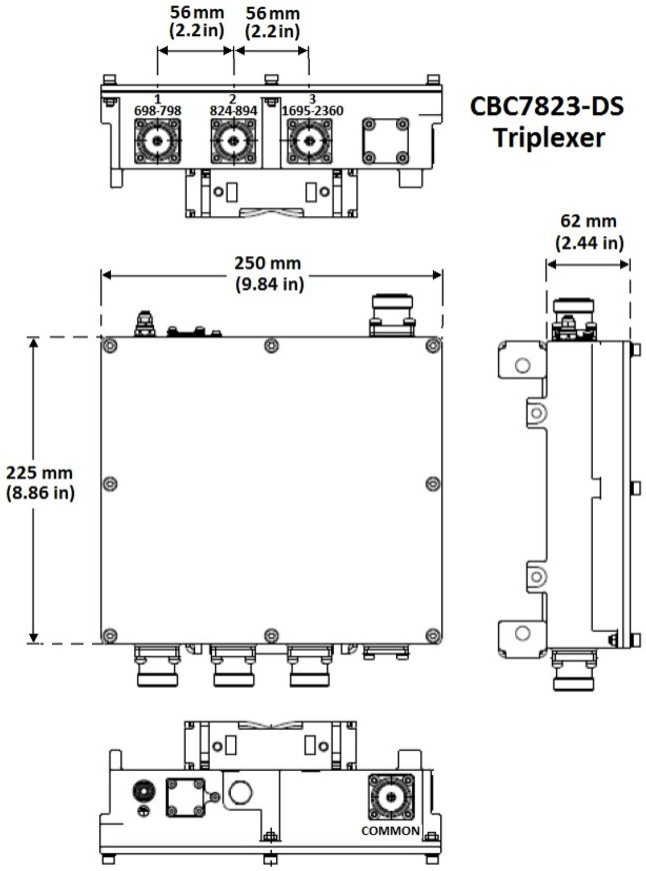
General Specifications

Product Family	CBC7823
Color	Gray
Common Port Label	COMMON
Modularity	1-Single
Mounting	Pole | Wall
Mounting Pipe Hardware	Band clamps (2)
RF Connector Interface	7-16 DIN Female
RF Connector Interface Body Style	Medium neck

Dimensions

Height	225 mm | 8.858 in
Width	250 mm | 9.843 in
Depth	62 mm | 2.441 in
Ground Screw Diameter	6.35 mm | 0.25 in
Mounting Pipe Diameter Range	40–160 mm

Outline Drawing



Electrical Specifications

Impedance	50 ohm
License Band, Band Pass	AWS 1700 | CEL 850 | DCS 1800 | IMT 2100 | PCS 1900 | USA 700 | USA 750 | WCS 2300

Electrical Specifications, Common Port

Composite Power, RMS	500 W

Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method	Auto sensing
dc/AISG Pass-through Path	See logic table

Lightning Surge Current	10 kA
Lightning Surge Current Waveform	8/20 waveform

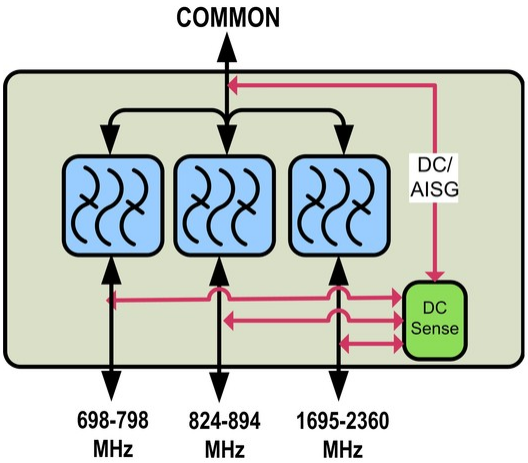
Electrical Specifications

Sub-module	**1**	**1**	**1**
Branch	1	2	3
Port Designation	698-798	824-894	1695-2360
License Band	USA 700, Band Pass USA 750, Band Pass	CEL 850, Band Pass	AWS 1700, Band Pass PCS 1900, Band Pass WCS 2300, Band Pass

Electrical Specifications, Band Pass

Frequency Range, MHz	**698–798**	**824–894**	**1695–2360**
Insertion Loss, typical, dB	0.3	0.3	0.3
Total Group Delay, maximum, ns	40	40	25
Total Group Delay, typical, ns	29	29	15
Return Loss, minimum, dB	20	20	20
Isolation, typical, dB	50	50	50
Input Power, RMS, maximum, W	200	200	200
Input Power, PEP, maximum, W	2000	2000	2000
3rd Order PIM, typical, dBc	-155	-155	-155
3rd Order PIM Test Method	2 x 20 W CW tones	2 x 20 W CW tones	2 x 20 W CW tones

Block Diagram



Logic Table

Combining Mode Operation (Ground Based)				
RF Ports Input Voltage				
698 to 798 MHz	824 to 894 MHz	1695 to 2360 MHz	COMMON	DC/AISG Path Selection
7 ≤ V ≤ 30	<7	<7	<7	**698 to 798 MHz to COMMON "ON"** 824 to 894 MHz "OFF" 1695 to 2360 MHz "OFF"
<7	**7 ≤ V ≤ 30**	<7	<7	698 to 798 MHz "OFF" **824 to 894 MHz to COMMON "ON"** 1695 to 2360 MHz "OFF"
<7	<7	**7 ≤ V ≤ 30**	<7	698 to 798 MHz "OFF" 824 to 894 MHz "OFF" **1695 to 2360 MHz to COMMON"ON"**
V<7 or V>30	V<7 or V>30	V<7 or V>30	V<7 or V>30	ALL ports OFF
Any 2 or more ports 7 ≤ V ≤ 30				ALL ports OFF

Splitting Mode Operation (Tower Top)				
RF Ports Input Voltage				
698 to 798 MHz	824 to 894 MHz	1695 to 2360 MHz	COMMON	DC/AISG Path Selection
<7	<7	<7	7 ≤ V ≤ 30	**ALL PORTS ON***
7 ≤ V ≤ 30	<7	<7	7 ≤ V ≤ 30	ALL ports OFF (Verified at Start Up)
<7	7 ≤ V ≤ 30	<7	7 ≤ V ≤ 30	ALL ports OFF (Verified at Start Up)
<7	<7	7 ≤ V ≤ 30	7 ≤ V ≤ 30	ALL ports OFF (Verified at Start Up)

*** DC/AISG will pass to all 3 Band RF Ports, External DC blocks required for proper installation**

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

Packaging and Weights

Included	Mounting hardware
Mounting Hardware Weight	0.5 kg | 1.102 lb
Volume	3.5 L
Weight, without mounting hardware	4.8 kg | 10.582 lb

Regulatory Compliance/Certifications

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