

CBC7823T-DS | E11F33P05



Twin Triplexer 700/850/1695-2360,DC Sense

OBSOLETE

This product was discontinued on: October 31, 2018

Replaced By:

CBC7823T-DS-43
E14F60P04

Twin 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 2-Twin

Mounting Pole | Wall

Mounting Pipe Hardware Band clamps (2)

RF Connector Interface 7-16 DIN Female

RF Connector Interface Body Style Long neck

Dimensions

Height 225 mm | 8.858 in

Width 250 mm | 9.843 in

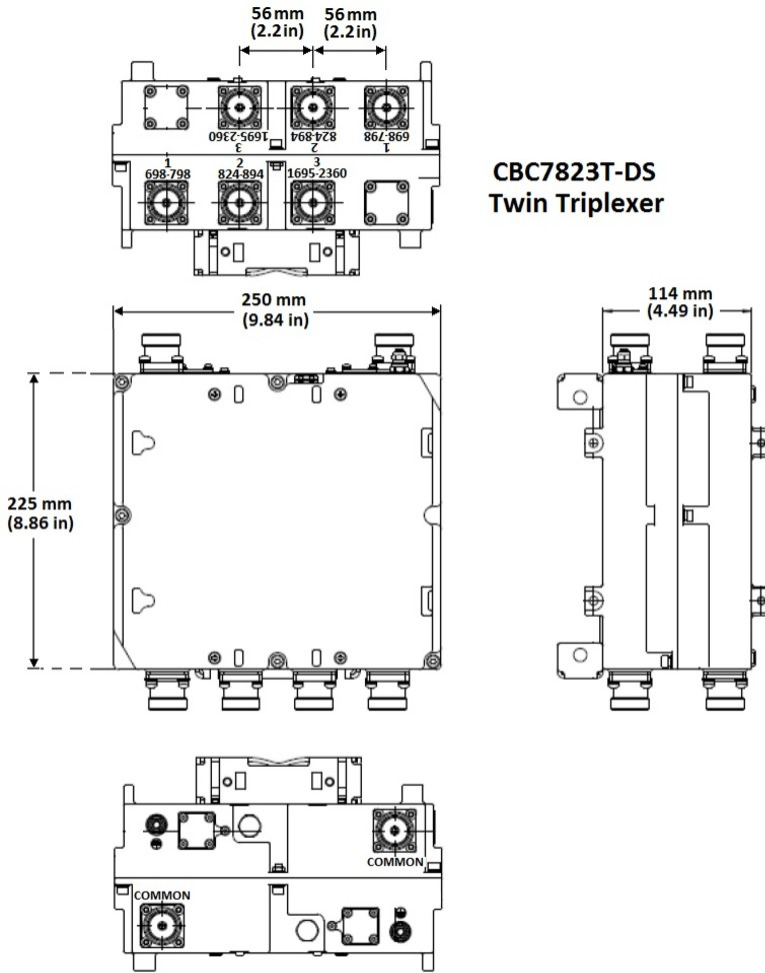
Depth 114 mm | 4.488 in

Ground Screw Diameter 6.35 mm | 0.25 in

Mounting Pipe Diameter Range 40–160 mm

CBC7823T-DS | E11F33P05

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
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Electrical Specifications, dc Power/Alarm

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

CBC7823T-DS | E11F33P05

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

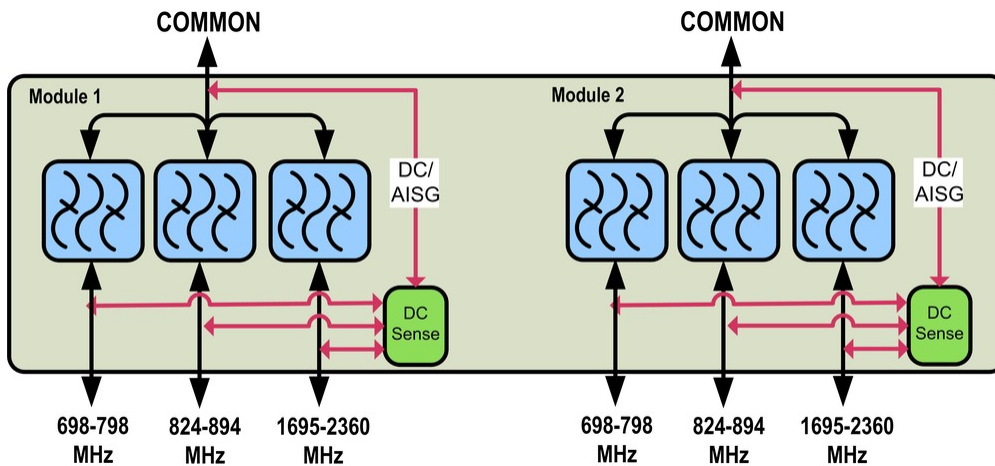
Electrical Specifications

Sub-module	1 2	1 2	1 2
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 DCS 1800, Band Pass IMT 2100, 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, minimum, 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				
700 MHz	850 MHz	1695-2360 MHz	COMMON	DC/AISG Path Selection
$7 \leq V \leq 30$	<7	<7	<7	700 MHz to COMMON "ON"
<7	$7 \leq V \leq 30$	<7	<7	850 MHz to COMMON "ON"
<7	<7	$7 \leq V \leq 30$	<7	1695-2360MHz to COMMON "ON"
Any 2 or more ports active $7 \leq V \leq 30$			<7	Path selection will follow below priority: 1695-2360MHz(1), 700MHz (2), 850MHz (3)

Splitting Mode Operation (Tower Top)				
RF Ports Impedance DC (Load sensing)				
700 MHz	850 MHz	1695-2360 MHz	COMMON	DC/AISG Path Selection
open/load	short	short	$7 \leq V \leq 30$	COMMON to 700 MHz "ON"
short	open/load	short	$7 \leq V \leq 30$	COMMON to 850 MHz "ON"
short	short	open/load	$7 \leq V \leq 30$	COMMON to 1695-2360MHz "ON"
Any 2 or more ports open/load impedance			$7 \leq V \leq 30$	DC/AISG will be routed to ALL ports with open/load impedance

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	6.5 L
Weight, without mounting hardware	8 kg 17.637 lb

Regulatory Compliance/Certifications

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

