

Crossband Coupler, 698–787 MHz/Cellular, dc pass on 698–787 MHz port

#### **OBSOLETE**

This product was discontinued on: December 31, 2018

Replaced By:

CBC78-DS-43 E14F05P18

Diplexer 698-803/824-894 MHz, DC Sense, 4.3-10

#### Product Classification

Product Type Coupler

General Specifications

Product Family

CBC78

Color

Gray

Common Port Label

COMM

Modularity

1-Single

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
 200 mm | 7.874 in

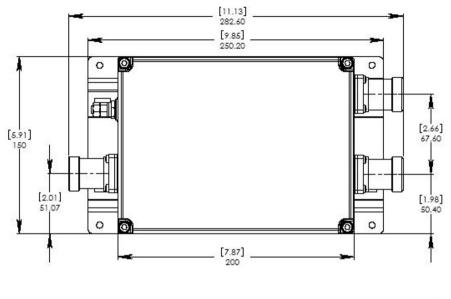
 Width
 150 mm | 5.906 in

 Depth
 66.5 mm | 2.618 in

 Ground Screw Diameter
 6.35 mm | 0.25 in



### Outline Drawing





### **Electrical Specifications**

**Impedance** 50 ohm

License Band, Band Pass CEL 850 | USA 700 | USA 750

## Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through, combinerBranch 1dc/AISG Pass-through, demultiplexerBranch 1Lightning Surge Current10 kA

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

### **Electrical Specifications**

Sub-module 1 1

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**Branch** 1 2

**Port Designation** 698-787 824-894

**License Band** USA 700, Band Pass CEL 850, Band Pass

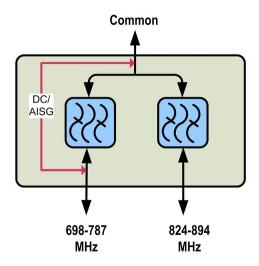
USA 750, Band Pass

### Electrical Specifications, Band Pass

Frequency Range, MHz	698-787	824-894
Insertion Loss, maximum, dB	0.25	0.25
Total Group Delay, maximum, ns	25	25
Return Loss, minimum, dB	22	22
Return Loss, typical, dB	24	24
Isolation, minimum, dB	50	50
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



#### **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%

COMMSCSPE®

Ingress Protection Test Method IEC 60529:2001, IP67

Packaging and Weights

**Included** Mounting hardware

Volume 2 L

**Weight, net** 3 kg | 6.614 lb

Regulatory Compliance/Certifications

Agency Classification

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

