

# Twin 2-pak Diplexer, 380–960 MHz/1425–2690 MHz, DC SMART bypass, with 4.3-10 connectors

- Industry leading PIM performance
- New 4.3-10 connectors for improved PIM performance and size reduction
- Minimal Insertion Loss
- Ultra-wideband low-band combiner
- Ultra-wideband high-band combiner
- DC/AISG SMART bypass functionality

#### **Product Classification**

Product Type Diplexer

#### General Specifications

Product Family CBC426
Color Gray
Common Port Label ANT
Modularity 2-Twin

MountingPole | WallMounting Pipe HardwareBand clamps (2)RF Connector Interface4.3-10 FemaleRF Connector Interface Body StyleLong neck

#### **Dimensions**

**Mounting Pipe Diameter Range** 

 Height
 200 mm | 7.874 in

 Width
 111 mm | 4.37 in

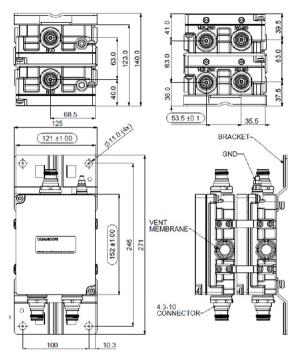
 Depth
 104 mm | 4.094 in

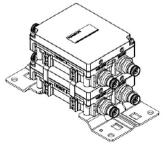
 Ground Screw Diameter
 5 mm | 0.197 in

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40-160 mm

### Outline Drawing





### **Electrical Specifications**

**Impedance** 50 ohm

**License Band, Band Pass**APT 700 | AWS 1700 | CEL 850 | CEL 900 | DCS 1800 | EDD 800 | IMT

2100 | IMT 2600 | LMR 750 | LMR 800 | LMR 900 | PCS 1900 | SDL

1400 | TDD 2300 | TDD 2600 | USA 700 | USA 750 | WCS 2300

License Band, LNA PDC 1500

### Electrical Specifications, dc Power/Alarm

dc/AISG Pass-through Method Auto sensing

dc/AISG Pass-through Path

Auto sensing circuitry detects dc/AISG signal presence and selects path

dc/AISG Pass-through, combiner dc Smart Bypass

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dc/AISG Pass-through, demultiplexer dc Smart Bypass

**Lightning Surge Current** 10 kA

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

Electrical Specifications, AISG

**AISG Carrier** 2176 KHz ± 100 ppm

Insertion Loss, maximum0.5 dBReturn Loss, minimum15 dB

## **Electrical Specifications**

Sub-module	1   2	1   2
Branch	1	2
Port Designation	PORT 1 380-960	PORT 2 1425-2690
License Band	APT 700, Band Pass CEL 850, Band Pass CEL 900, Band Pass EDD 800, Band Pass LMR 750, Band Pass	AWS 1700, Band Pass DCS 1800, Band Pass IMT 2100, Band Pass IMT 2600, Band Pass PCS 1900, Band Pass
	LMR 800, Band Pass LMR 900, Band Pass USA 700, Band Pass USA 750. Band Pass	TDD 2300, Band Pass TDD 2300, Band Pass TDD 2600, Band Pass WCS 2300, Band Pass PDC 1500, Band Pass

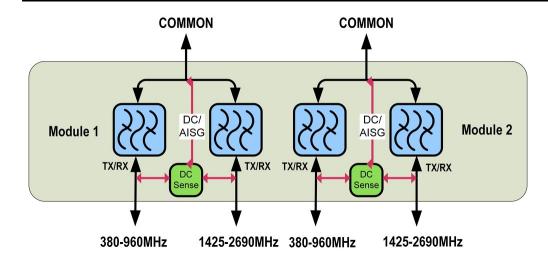
### Electrical Specifications, Band Pass

Frequency Range, MHz	380-960	1425-2690
Insertion Loss, typical, dB	0.1	0.1
Total Group Delay, maximum, ns	10	10
Return Loss, minimum, dB	20	20
Return Loss, typical, dB	23	23
Isolation, minimum, dB	50	50
Input Power, RMS, maximum, W	500	500
Input Power, PEP, maximum, W	5000	5000
3rd Order PIM, typical, dBc	-163	-163
3rd Order PIM Test Method	2 x 20 W CW tones	Two +43 dBm carriers

### Block Diagram



SDL 1400, Band Pass



### **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 2.3 L

**Weight, net** 3.8 kg | 8.378 lb

### Regulatory Compliance/Certifications

#### Agency Classification

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

