

# 641280-DF-9-DCB

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Crossband Coupler, Cellular/900 MHz/DCS 1800/PCS/AWS

**OBSOLETE**

This product was discontinued on: December 1, 2019

## Product Classification

**Product Type** Coupler

## General Specifications

**Product Family** 641280  
**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** Long neck

## Dimensions

**Height** 186 mm | 7.323 in  
**Width** 186 mm | 7.323 in  
**Depth** 50 mm | 1.969 in  
**Ground Screw Diameter** 8 mm | 0.315 in  
**Mounting Pipe Diameter Range** 40–160 mm

## Electrical Specifications

**Impedance** 50 ohm

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## License Band, Band Pass

AWS 1700 | CEL 850 | CEL 900 | DCS 1800 | IMT 2100 | LMR 800 | LMR 900 | PCS 1900 | TDD 1900

## Electrical Specifications, Common Port

**Composite Power, PEP** 12000 W

## Electrical Specifications, dc Power/Alarm

**dc/AISG Pass-through, combiner** Branch 2

**dc/AISG Pass-through, demultiplexer** Branch 2

**Lightning Surge Current** 15 kA

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

## Electrical Specifications

|                         |  |   |
|-------------------------|--|---|
| <b>Sub-module</b>       | <b>1</b>   | <b>1</b>  |
| <b>Branch</b>           | 1  | 2   |
| <b>Port Designation</b> | LOW BAND   | HIGH BAND   |
| <b>License Band</b>     | CEL 850, Band Pass<br>CEL 900, Band Pass<br>LMR 800, Band Pass<br>LMR 900, Band Pass | AWS 1700, Band Pass<br>IMT 2100, Band Pass<br>TDD 1900, Band Pass |

## Electrical Specifications Tx (Downlink)

|                                     |                   |
|-------------------------------------|-------------------|
| <b>Frequency Range, MHz</b>         | <b>2160–2170</b>  |
| <b>Insertion Loss, typical, dB</b>  | 0.2               |
| <b>Return Loss, typical, dB</b>     | 16                |
| <b>Input Power, RMS, maximum, W</b> | 275               |
| <b>Input Power, PEP, maximum, W</b> | 6                 |
| <b>3rd Order PIM, typical, dBc</b>  | -153              |
| <b>3rd Order PIM Test Method</b>    | 2 x 20 W CW tones |

## Electrical Specifications, Band Pass

|                                     |                |                  |
|-------------------------------------|----------------|------------------|
| <b>Frequency Range, MHz</b>         | <b>806–960</b> | <b>2160–2170</b> |
| <b>Insertion Loss, maximum, dB</b>  | 0.15           | 0.2              |
| <b>Return Loss, minimum, dB</b>     | 20             | 16               |
| <b>Isolation, minimum, dB</b>       | 47             | 47               |
| <b>Input Power, RMS, maximum, W</b> | 500            | 275              |
| <b>Input Power, PEP, maximum, W</b> | 12000          | 6000             |
| <b>3rd Order PIM, maximum, dBc</b>  |                | -153             |

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|                                    |                   |                   |
|------------------------------------|-------------------|-------------------|
| <b>3rd Order PIM, typical, dBc</b> | -153              | -153              |
| <b>3rd Order PIM Test Method</b>   | 2 x 20 W CW tones | 2 x 20 W CW tones |

## Environmental Specifications

|                                       |                                      |
|---------------------------------------|--------------------------------------|
| <b>Operating Temperature</b>          | -40 °C to +65 °C (-40 °F to +149 °F) |
| <b>Relative Humidity</b>              | Up to 100%                           |
| <b>Corrosion Test Method</b>          | IEC 60068-2-11, 30 days              |
| <b>Ingress Protection Test Method</b> | IEC 60529:2001, IP68                 |

## Packaging and Weights

|                    |                   |
|--------------------|-------------------|
| <b>Included</b>    | Mounting hardware |
| <b>Volume</b>      | 1.7 L             |
| <b>Weight, net</b> | 2 kg   4.409 lb   |

## Regulatory Compliance/Certifications

| <b>Agency</b> | <b>Classification</b>  |
|---------------|--|
| CHINA-ROHS    | Above maximum concentration value  |
| ISO 9001:2015 | Designed, manufactured and/or distributed under this quality management system   |
| REACH-SVHC    | Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a> |
| ROHS          | Compliant/Exempted   |
| UK-ROHS       | Compliant/Exempted   |

