RFS CDS\*\*E series Directional Coupler has been designed for outdoor applications covering 694 to 3800MHz. Units couple off a defined fraction of signal from 6 to 30 dB with minimal reflections or loss. The frequency range allows use with antennas and leaky cable systems and in wireless base stations. With minimal solder joints, the dissipative loss has been minimized and reliability enhanced.

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### FEATURES / BENEFITS

- · 20 dB coupling value
- · Low insertion loss
- · High power handling
- · Small size, Low weight
- · 716-female connectors
- -155 dBc PIM

## **Technical features**

### **STRUCTURE**

| Product Type           | Directional Coupler |
|------------------------|---------------------|
| Techn. Application     | Indoor              |
| Number of Input Ports  | 1                   |
| Number of Output Ports | 2                   |

### **ELECTRICAL SPECIFICATIONS**

| Frequency<br>Range         | MHz     | 694<br>380                      | Ī             |
|----------------------------|---------|---------------------------------|---------------|
| Connector Type             |         | 71<br>fem                       | _             |
| Max. VSWR /<br>Return Loss | VSWR/dB | 1.25/                           |               |
| Insertion Loss<br>max.     | dB      | 0.                              | 2             |
| Coupling Value             | dB      | 20                              | )             |
| Coupling Flatness max.     | dB      | ±1.                             | .0            |
| Intermodulation (IM3)      |         | -155<br>wit<br>2x4<br>dB<br>ton | :h<br>13<br>m |
| Directivity min.           | dB      | 20                              | )             |

| Impedance         | Ohm | 50  |
|-------------------|-----|-----|
| Total Input Power | W   | 200 |

# TEMPERATURE SPECIFICATIONS

| Temperature Range | °C (°F) | -25 to +65 (-13 to +149) |
|-------------------|---------|--------------------------|
|-------------------|---------|--------------------------|

# MECHANICAL SPECIFICATIONS

| Height | mm (in) | 16.5 (0.65)  |
|--------|---------|--------------|
| Width  | mm (in) | 63.2 (2.49)  |
| Length | mm (in) | 159.4 (6.28) |

**CDS20DE-694/3800** REV : P1 REV DATE : 04 Nov 2019 **www.rfsworld.com** 



# **TESTING AND ENVIRONMENTAL Environmental Class** IP65 117.0 (4.61) 123.0 (4.84) 159.4 (6.28) 16.5 (0.65) Dimensions mm(inch) **External Document Links** Notes

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