

# BI-DIRECTIONAL COUPLER

## SURFACE MOUNT MODEL: SDC360440-10

**WIDE BANDWIDTH**

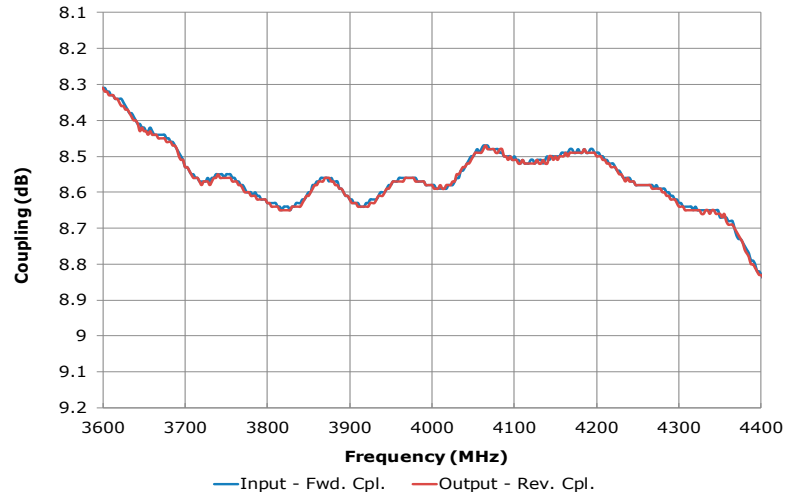
**3.6 - 4.4 GHz**

**FEATURES:**

- ▶ Power Rating 10 Watts
- ▶ Low Insertion Loss
- ▶ Good Coupling Flatness

**APPLICATION:**

- ▶ Signal Monitoring and Detection



**SPECIFICATIONS**

|                               |                   |               |
|-------------------------------|-------------------|---------------|
| Frequency                     | 3.6 - 4.4 GHz     |               |
| Coupling                      | 8.6±0.5 dB (Nom.) |               |
| Coupling Flatness (dB)        | Typ.              | Max.          |
|                               | ±0.25             | ±0.60         |
| Insertion Loss <sup>1</sup>   | Typ.              | Max.          |
|                               | 0.7               | 1.4           |
| Directivity (dB) <sup>2</sup> | Typ.              | Min.          |
|                               | 18                | 10            |
| Input Power Rating            | 10 Watts (CW)     |               |
| Impedance                     | 50 Ohms (Nom.)    |               |
| VSWR                          | Input/Output      | 1.40:1 (Typ.) |
|                               | Coupled           | 1.40:1 (Typ.) |
| Operating Temperature Range   | -40 to +85 °C     |               |
| Storage Temperature Range     | -55 to +100 °C    |               |

<sup>1</sup> Excluding coupling loss.  
<sup>2</sup> Directivity is the isolation value minus the coupling value.

**Package #** 400

**RECOMMENDED PCB LAYOUT**

TOLERANCES ON THREE DECIMAL PLACES = ± 0.015  
 PACKAGE MOUNTING: SEE APPLICATION NOTE AN7301

| PORT CONFIGURATION |        |              |              |            |
|--------------------|--------|--------------|--------------|------------|
| Input              | Output | FWD. Coupled | REV. Coupled | Gnd.       |
| 4                  | 8      | 5            | 7            | All Others |

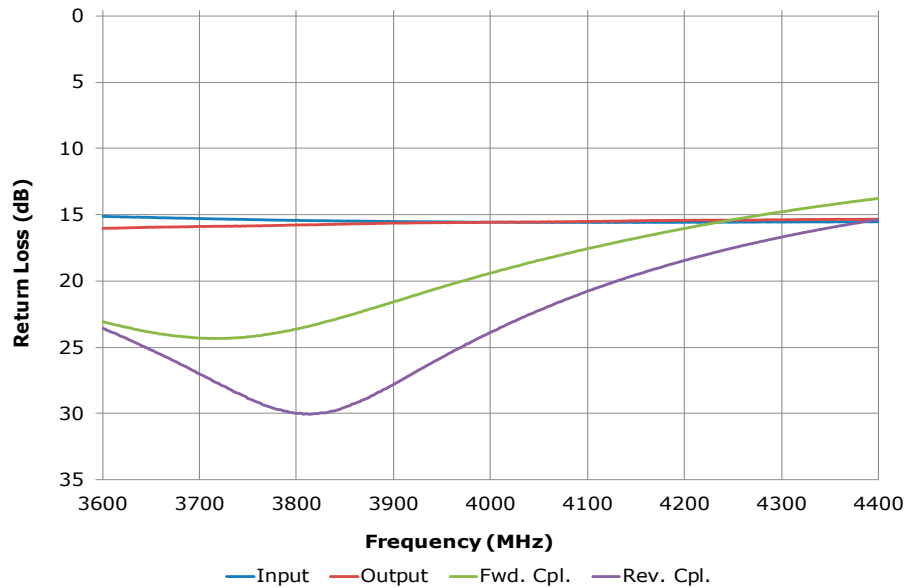
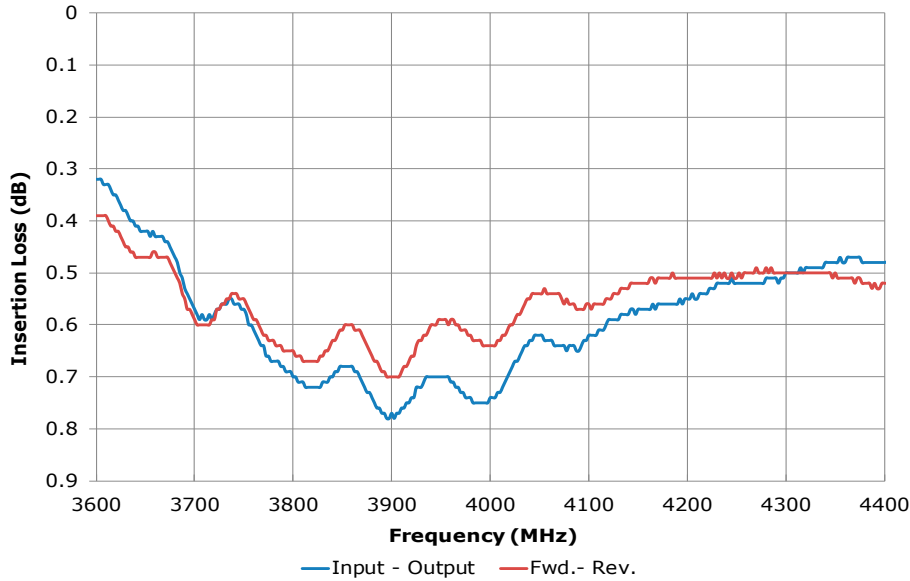
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PERFORMANCE PLOTS

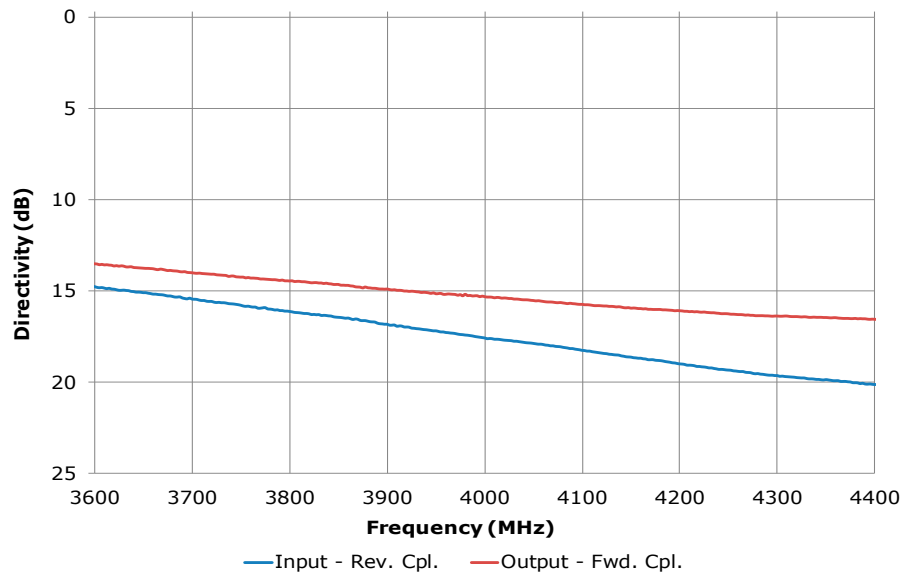


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PERFORMANCE PLOTS