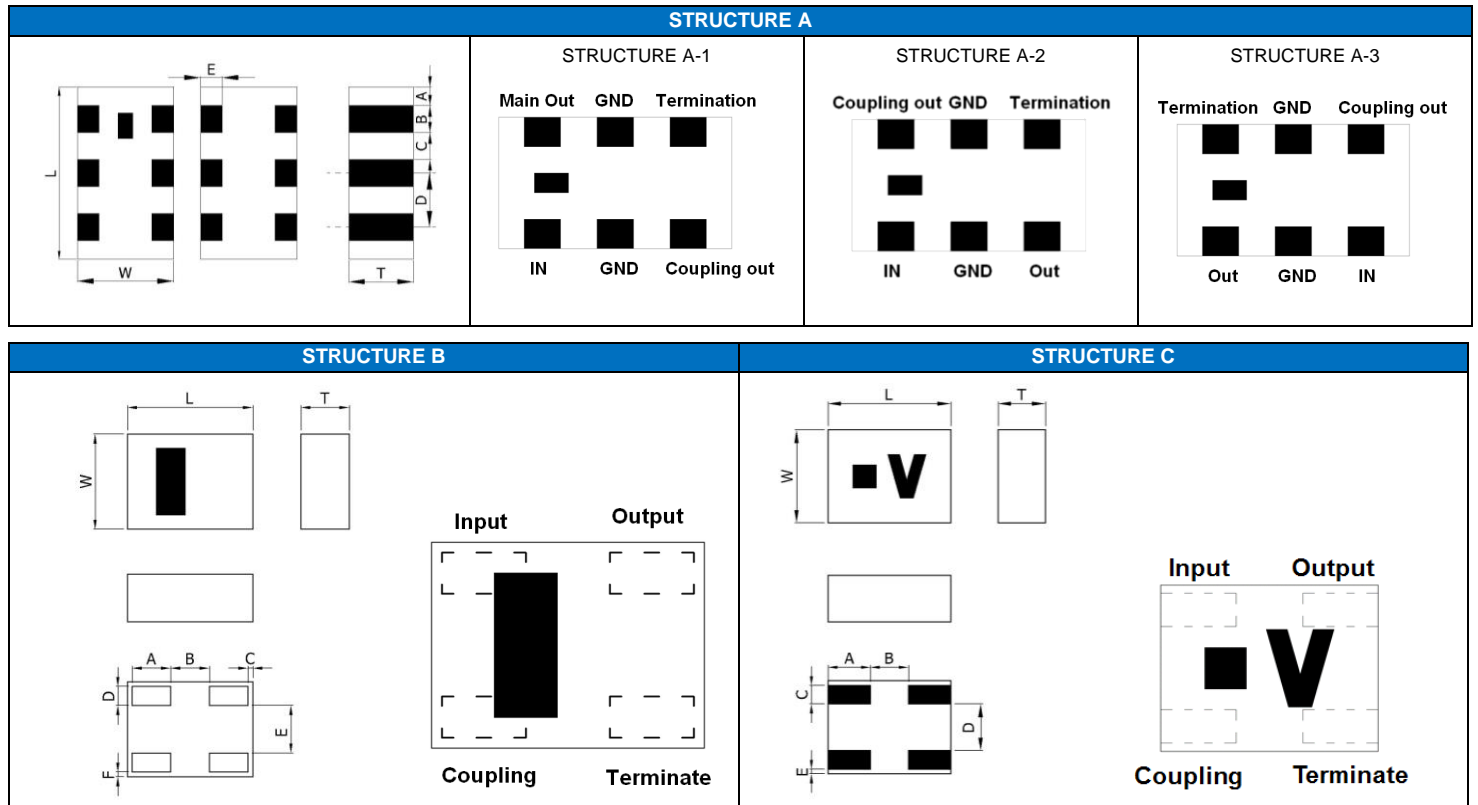


# COUPLER

## ■ STRUCTURE AND PIN ASSOCIATED



## ■ STRUCTURE AND DIMENSION

Unit: mm

| Structure/<br>Dimension | L         | W         | T         | A          | B         | C           | D         | E           | F           |
|-------------------------|-----------|-----------|-----------|------------|-----------|-------------|-----------|-------------|-------------|
| A                       | 1.60±0.10 | 0.80±0.10 | 0.60±0.10 | 0.10±0.10  | 0.30±0.10 | 0.25±0.10   | 0.55±0.10 | 0.20±0.10   | -           |
|                         | 1.60±0.10 | 0.80±0.10 | 0.60±0.10 | 0.175±0.10 | 0.25±0.10 | 0.25±0.10   | 0.50±0.10 | 0.20±0.10   | -           |
| B                       | 0.65±0.04 | 0.50±0.04 | 0.35±0.10 | 0.20±0.04  | 0.20±0.04 | 0.025±0.025 | 0.10±0.04 | 0.25±0.04   | 0.025±0.025 |
| C                       | 0.65±0.10 | 0.50±0.10 | 0.35±0.05 | 0.225±0.10 | 0.20±0.05 | 0.10±0.05   | 0.25±0.05 | 0.025±0.025 | -           |

## ■ ELECTRICAL SPECIFICATION

### ISM Band 2.4GHz Application

| Part Number        | Frequency (MHz) | Insertion Loss (dB)           | Coupling in BW | Directivity in BW dB (min.) | Isolation in BW dB (min.) | VSWR | Dimension (mm <sup>3</sup> ) | Structure |
|--------------------|-----------------|-------------------------------|----------------|-----------------------------|---------------------------|------|------------------------------|-----------|
| RFCPL1806B2450T    | 2400~2500       | 1.83                          | 6.5 ± 1.0 dB   | -                           | 21.0 dB min               | 1.5  | 1.60x1.80x0.60               | A-1       |
| RFCPL1810B2450T    | 2400~2500       | 0.74                          | 10.0 ± 1.0 dB  | -                           | 22.0 dB min               | 1.8  | 1.60x1.80x0.60               | A-1       |
| TFCPL0605B24508Q1C | 2400~2500       | 0.32(25°C)<br>0.40(-40~+85°C) | 14.6 ± 1.0 dB  | 20.0 dB min.                | -                         | 1.3  | 0.60x0.50x0.35               | B         |

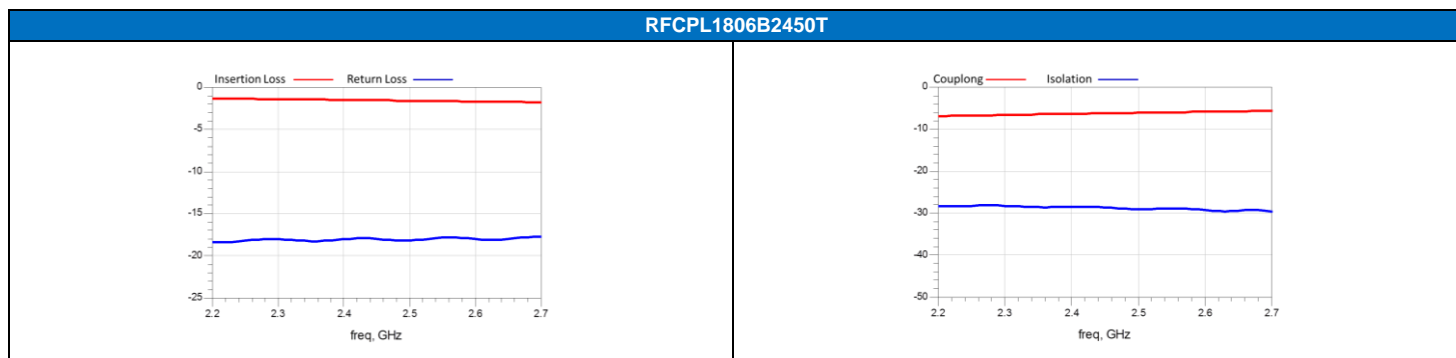
## ISM Band 2.4/5GHz Application

| Part Number        | Frequency (MHz) | Insertion Loss (dB)           | Coupling in BW | Directivity in BW dB (min.) | Isolation in BW dB (min.) | VSWR | Dimension (mm <sup>3</sup> ) | Structure |
|--------------------|-----------------|-------------------------------|----------------|-----------------------------|---------------------------|------|------------------------------|-----------|
| TFCPL0605030L18A1U | 2400~2500       | 0.5                           | 19.0±1.5dB     | 15 dB min.                  | -                         | 1.3  | 0.65x0.50x0.35               | B         |
|                    | 4900~5850       | 0.5                           | 12.5±1.5dB     | 15 dB min.                  | -                         | 1.3  |                              |           |
| TFCPL0605030L28Q1C | 2400~2500       | 0.2                           | 19.3±0.7dB     | 15 dB min.                  | -                         | 1.3  | 0.65x0.50x0.35               | B         |
|                    | 5150~5850       | 0.5                           | 13.0±1.5dB     | 15 dB min.                  | -                         | 1.3  |                              |           |
| RFCPL0605030L58Q1C | 2400~2500       | 0.3                           | 19.0±1.5dB     | 14.5 dB min.                | -                         | 1.3  | 0.65x0.50x0.35               | C         |
|                    | 4900~5850       | 0.6                           | 13.0±2.0dB     | 13.5dB min.                 | -                         | 1.8  |                              |           |
| RFCPL0605030L6T    | 2400~2500       | 0.40(25°C)<br>0.45(-40~+85°C) | 21.5±1.5dB     | 15 dB min.                  | -                         | 1.3  | 0.65x0.50x0.35               | C         |
|                    | 4900~5850       | 0.40(25°C)<br>0.45(-40~+85°C) | 15.0±1.5dB     | 15 dB min.                  | -                         | 1.3  |                              |           |
| RFCPL0605030L9T    | 2400~2500       | 0.20(25°C)<br>0.25(-40~+85°C) | 19.3±0.7dB     | 15 dB min.                  | -                         | 1.3  | 0.65x0.50x0.35               | C         |
|                    | 4900~5850       | 0.50(25°C)<br>0.55(-40~+85°C) | 13.0±1.5dB     | 15 dB min.                  | -                         | 1.3  |                              |           |

## LTE BAND APPLICATION

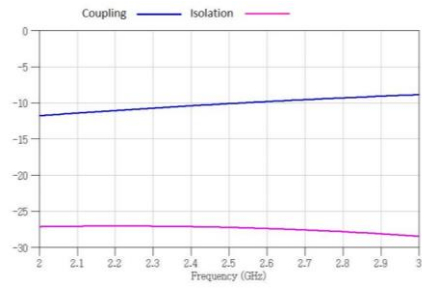
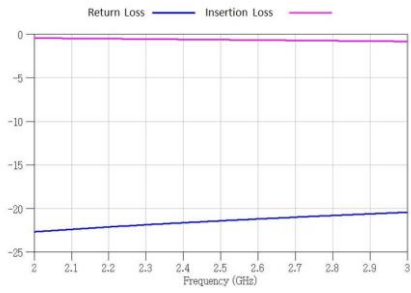
| Part Number        | Frequency (MHz) | Insertion Loss (dB)  | Coupling in BW   | Directivity in BW dB (min.) | Isolation in BW dB (min.)  | VSWR | Dimension (mm <sup>3</sup> ) | Structure |
|--------------------|-----------------|--|--|-----------------------------|--|------|------------------------------|-----------|
| RFCPL1608070P08Q1C | 698~2690        | 0.20(698~960MHz)<br>0.22(1427.9~2170MHz)<br>0.25(2300~2690MHz)   | 23.0~27.0(698~915MHz)<br>21.5~26.5(1427.9~2025MHz)<br>22.5~27.5(2300~2620MHz)        | 20.                         | -  | 1.5  | 1.60x1.80x0.60               | A-2       |
| RFCPL1608070P18Q1C | 698~2690        | 0.20(698~960MHz)<br>(Typ.0.02)<br>0.22(1710~2170MHz)<br>(Typ.0.07)<br>0.25(2300~2690MHz)<br>(Typ.0.10)                               | 23.0~27.0(698~915MHz)<br>21.5~26.5(1710~2025MHz)<br>22.5~27.5(2300~2620MHz)          | 20                          | -  | 1.45 | 1.60x1.80x0.60               | A-3       |
| RFCPL1608070P28Q1C | 698~2690        | 0.20(698~960MHz)<br>0.22(1427.9~2170MHz)<br>0.25(2300~2690MHz)   | 23.0~27.0(698~915MHz)<br>21.5~26.5(1427.9~2025MHz)<br>22.5~27.5(2300~2620MHz)        | 20                          | -  | 1.5  | 1.60x1.80x0.60               | A-2       |
| RFCPL1608070P38Q1C | 698~2690        | 0.20(698~960MHz)<br>0.22(1710~2170MHz)<br>0.25(2300~2690MHz)   | 23.0~27.0(698~915MHz)<br>21.5~26.5(1710~2025MHz)<br>22.5~27.5(2300~2620MHz)          | 20                          | -  | 1.45 | 1.60x1.80x0.60               | A-3       |
| RFCPL1608070PHT    | 699~2155        | 0.20(699~960MHz)<br>0.22(1710~2155MHz)   | 24.5~28.5(699~960MHz)<br>23.0~28.0(1710~1910MHz)                                     | 20                          | -  | 1.45 | 1.60x1.80x0.60               | A-4       |
| RFCPL1608070PKT    | 699~2155        | 0.20(699~960MHz)<br>0.22(1710~2155MHz)   | 24.5~28.5(699~960MHz)<br>23.0~28.0(1710~1910MHz)                                     | 20                          | -  | 1.45 | 1.60x1.80x0.60               | A-3       |
| RFCPL1608070PM9T16 | 700~2700        | 0.2(700~790MHz)<br>(Typ.0.07)<br>0.2(820~900MHz)<br>(Typ.0.07)<br>0.3(1701~2100MHz)<br>(Typ.0.15)<br>0.3(2300~2700MHz)<br>(Typ.0.15) | 24~27(700~790MHz)<br>24~27(820~900MHz)<br>20~23(1701~2100MHz)<br>20~23(2300~2700MHz) | -                           | 40(700~790MHz)<br>40(820~900MHz)<br>35(1701~2100MHz)<br>35(2300~2700MHz) | 1.45 | 1.60x1.80x0.60               | A-1       |

## ■ TYPICAL ELECTRICAL CHARACTERISTICS

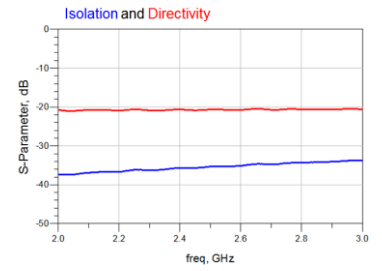
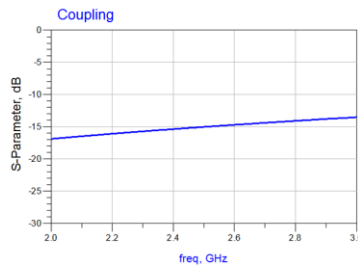
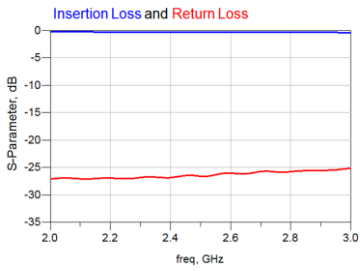


# TYPICAL ELECTRICAL CHARACTERISTICS

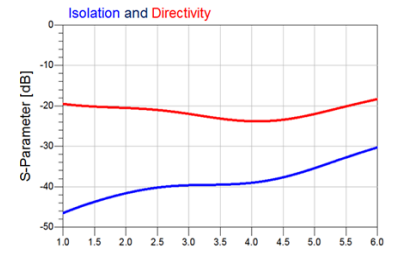
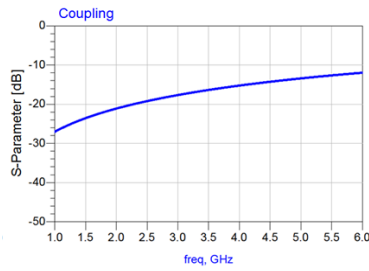
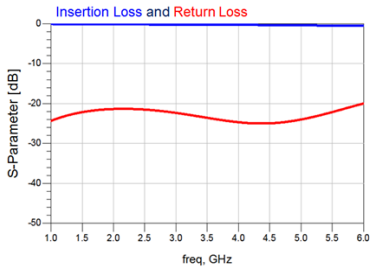
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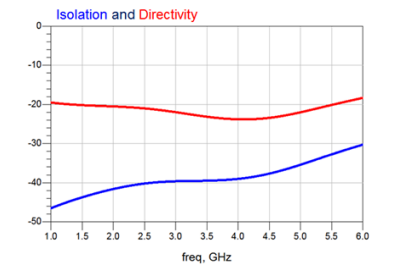
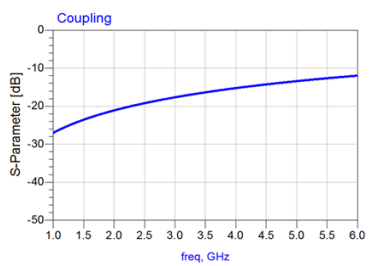
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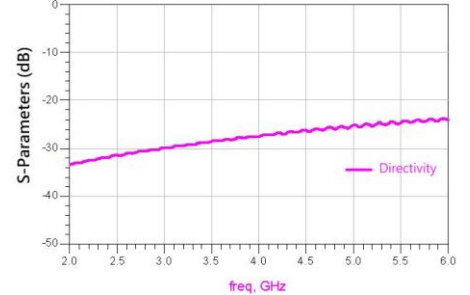
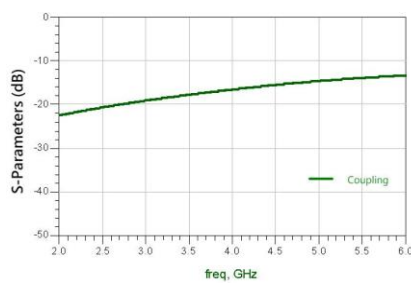
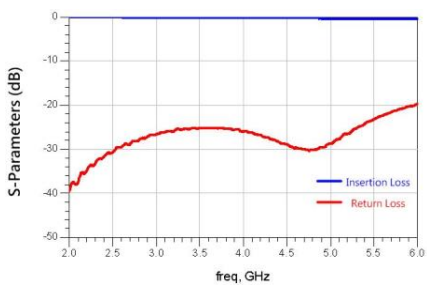
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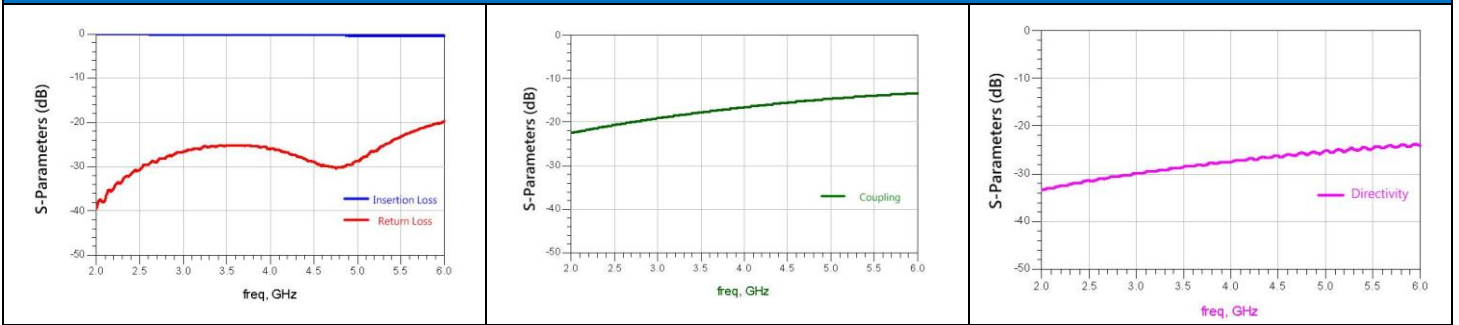


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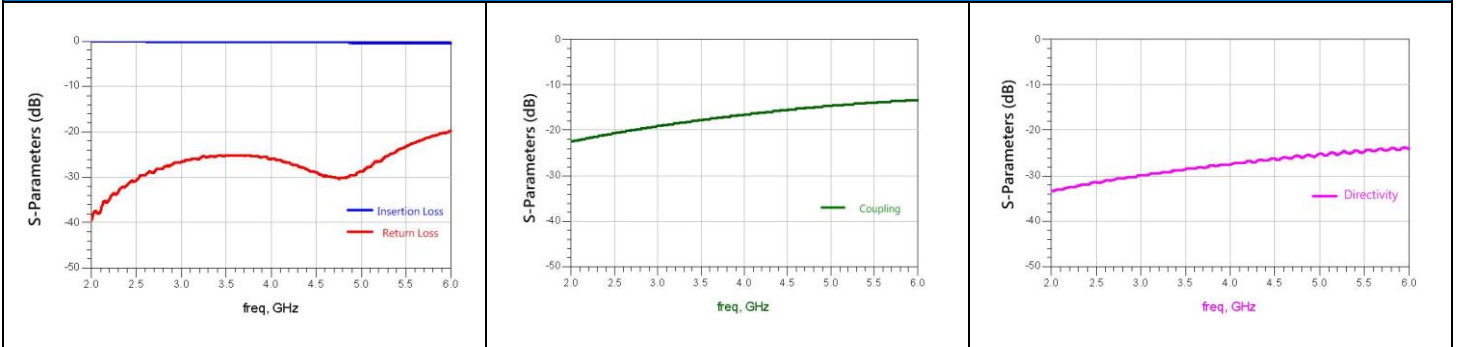


## TYPICAL ELECTRICAL CHARACTERISTICS

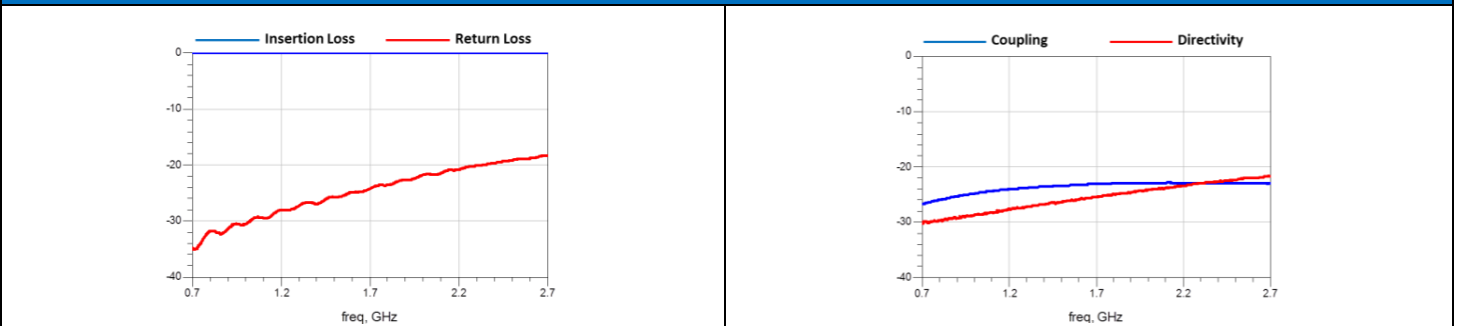
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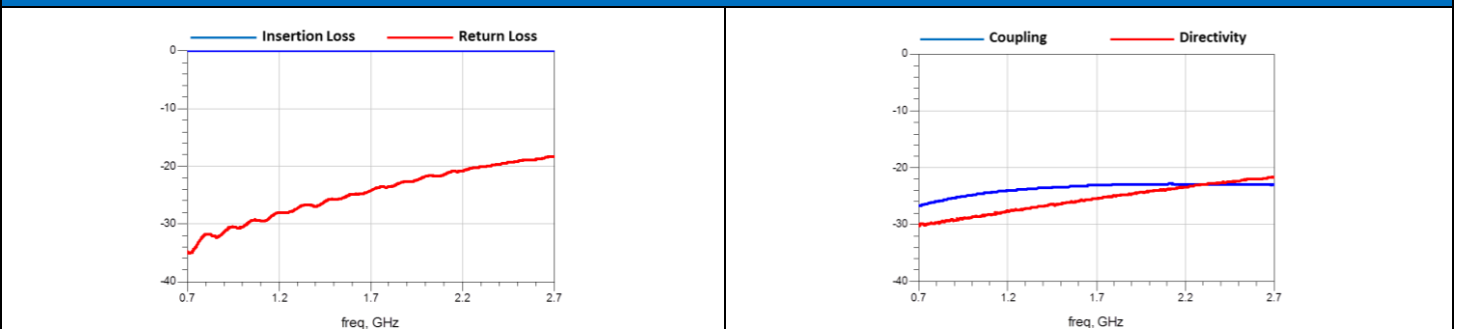
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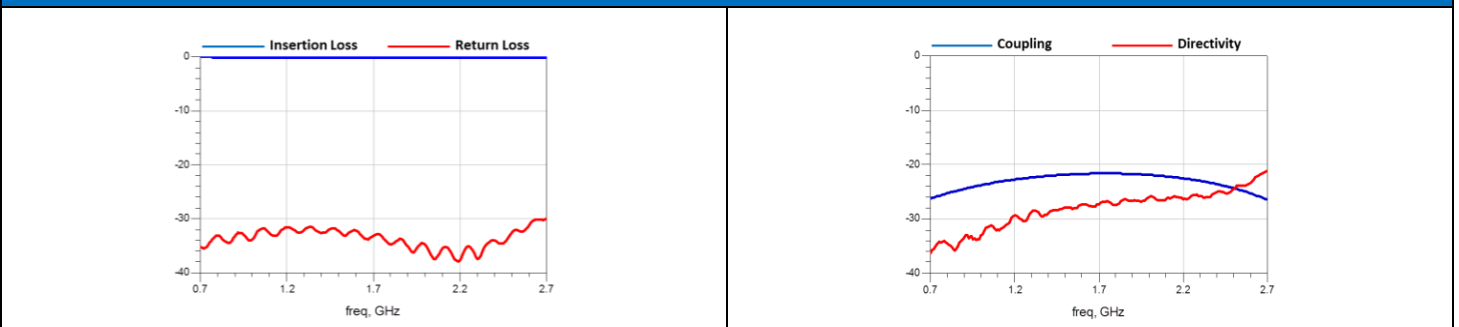
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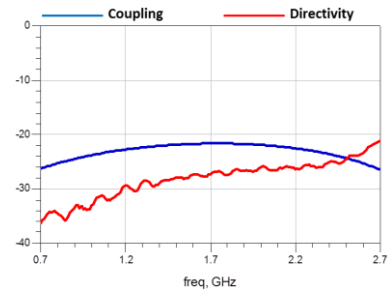


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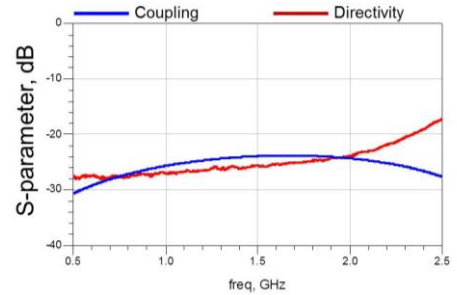
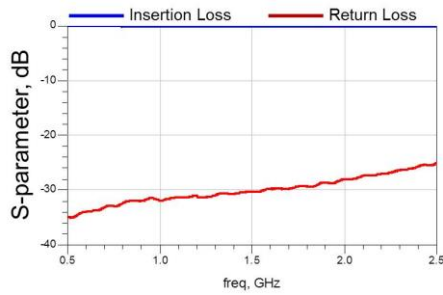


## TYPICAL ELECTRICAL CHARACTERISTICS

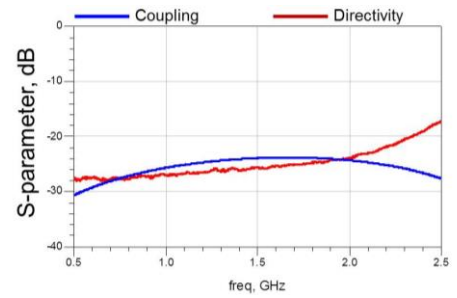
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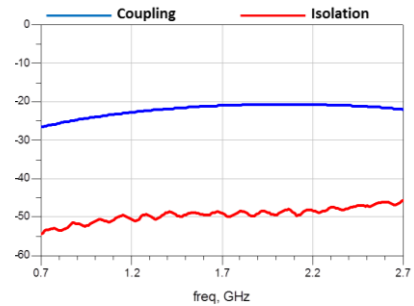
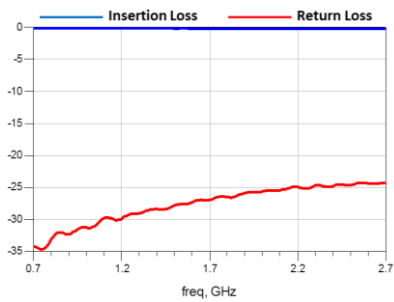
RFCL1608070PHT



RFCL1608070PKT



RFCL1608070PM9T16



- For more information, please contact with local sales representative
- All specifications are subject to change without notice