

SP6T RF Switch

JSW6-33DR+

50Ω 5 to 2700 MHz High Power 3W

The Big Deal

- High Port count in super small size
- Single Positive Supply Voltage, 2.5 – 4.8V
- High Power P0.1dB, 3W typ.
- Low Insertion Loss, 0.6 dB at 1 GHz



CASE STYLE: MT1817

Product Overview

JSW6-33DR+ is a high power reflective SP6T RF switch, with reflective short on output ports in the off condition. Made using Silicon-on-Insulator process, it has very high IP3, a built-in CMOS driver and negative voltage generator. Its tiny 2x2mm, 14-lead case enables wideband performance in tight spaces and dense PCB layouts.

Key Features

| Feature | Advantages |
|---|--|
| Wideband operation 5-2700 MHz | Enables a single component to be used in a vast array of applications from VHF up to 2.7 GHz. |
| High IIP3: 55 dBm typ. | Results in little or negligible inter-modulation generation, meeting requirements for digital communication signals. |
| Low Loss, 0.6 dB at 1 GHz High input power, 3W | Low loss and high power capability enable a single switch to be used for a variety of applications, saving inventory. |
| Built in negative voltage generator | Operates with a single positive supply voltage; no need for DC blocking capacitors, unless external DC is present at the RF ports. |
| Built-in CMOS driver | No need for external driver, saving PCB space and cost. |
| Tiny MCLP package 2 x 2mm, 14-lead | Provides low inductance, repeatable transitions, and excellent thermal contact to PCB. |



SP6T RF Switch

50Ω 5-2700 MHz

Reflective RF Switch with internal driver.
Single Supply Voltage, +2.5V to +4.8V, High Power 3W

Product Features

- High Isolation, 37 dB typ. at 1 GHz
- Low insertion loss, 0.6 dB typ. at 1 GHz
- High IP3, 59 dBm typ. at 1 GHz
- Low current consumption, 40 µA typ.
- High Power, P0.1dB 3W typ.



JSW6-33DR+

CASE STYLE: MT1817

Typical Applications

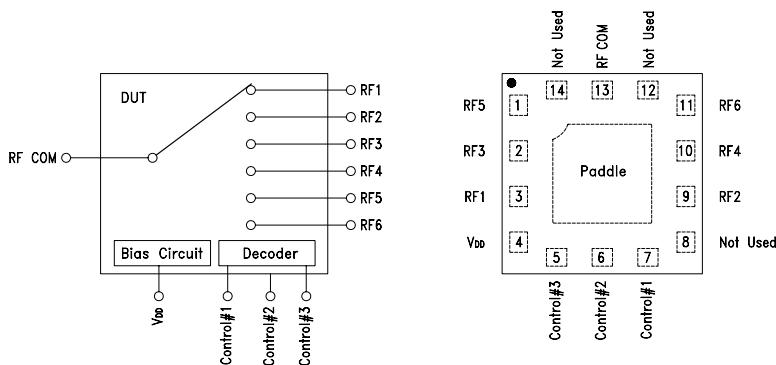
- CATV systems
- SATCOM system
- Automated Test Stations
- Telecom systems

+RoHS Compliant
The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

General Description

JSW6-33DR+ is a high power 3W reflective SPDT switch with integral driver, operates with single positive supply voltage while consuming, 40 µA typical. It has been designed for very wideband operation of 5-2700 MHz. It is packaged in a tiny 14-lead 2mm x 2mm x 0.55mm package and is rated MSL1 and class 1B ESD.

Simplified Schematic and Pad Description



| Function | Pad Number | Description |
|----------|------------|----------------------|
| RF COM | 13 | RF Common/ SUM Port |
| RF1 | 3 | RF Out #1/In Port #1 |
| RF2 | 9 | RF Out #2/In Port #2 |
| RF3 | 2 | RF Out #3/In Port #3 |
| RF4 | 10 | RF Out #4/In Port #4 |
| RF5 | 1 | RF Out #5/In Port #5 |
| RF6 | 11 | RF Out #6/In Port #6 |

| Function | Pad Number | Description |
|------------|------------|----------------|
| Control #1 | 7 | Control IN #1 |
| Control #2 | 6 | Control IN #2 |
| Control #3 | 5 | Control IN #3 |
| VDD | 4 | Supply Voltage |
| GND | Paddle | Ground |
| Not Used | 8,12,14 | No Connection |

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RF Electrical Specifications⁽¹⁾, 5 - 2700 MHz, T_{AMB}=25°C, V_{DD}= +2.5 to 4.8V

| Parameter | Condition (MHz) | Min. | Typ. | Max. | Units |
|--|-----------------|------|------|------|-------|
| Frequency Range | | 5 | | 2700 | MHz |
| Insertion Loss ⁽²⁾ | 5 to 1000 | — | 0.6 | 0.8 | dB |
| | 1000 to 2000 | — | 0.6 | 0.8 | |
| | 2000 to 2700 | — | 0.6 | 0.8 | |
| Isolation between Common Port and RF1 to RF6 Ports ⁽³⁾ | 5 to 1000 | 35 | 37 | — | dB |
| | 1000 to 2000 | 28 | 30 | — | |
| | 2000 to 2700 | 25 | 27 | — | |
| Return Loss (ON STATE) RF-COM, RF1 to RF6 Ports | 5 to 1000 | — | 15.5 | — | dB |
| | 1000 to 2000 | — | 14.2 | — | |
| | 2000 to 2700 | — | 14.3 | — | |
| Input IP3 V _{DD} =2.5 to 4.8V V _{DD} =3.0V | 5 to 500 | — | 55 | — | dBm |
| | 1000 to 2700 | — | 59 | — | |
| 0.1dB Input Compression ⁽⁴⁾ | 5 to 2700 | — | 35 | — | dBm |

DC Electrical Specifications

| Parameter | Min. | Typ. | Max. | Units |
|--|------|------|------|-------|
| V _{DD} , Supply Voltage | 2.5 | 3.0 | 4.8 | V |
| Supply Current (V _{DD} = 3V) | | 40 | | µA |
| Control Voltage Low | 0 | | 0.4 | V |
| Control Voltage High | 1.35 | 1.8 | 2.7 | V |
| Control Current | | 0.5 | 1.0 | µA |
| Shutdown Current at V _{DD} = 3V | | 5 | | µA |

Notes:

1. As measured in Mini-Circuit's test board TB-724+ (see Characterization Test Circuit, Fig.1).
2. Insertion loss values are de-embedded from test board loss.
3. Isolations for other port combinations, see Tables 1 & 2
4. Do not exceed RF input power as shown in Absolute Maximum Rating table.

Switching Specifications

| Parameter | Min. | Typ. | Max. | Units |
|---|------|--------------------------------------|------|-------------------|
| Rise/Fall Time (10 to 90% or 90 to 10% RF) | — | 0.42 (Rise Time) 0.84 (Fall Time) | — | µSec |
| Switching Time, 50% CTRL to 90/10% RF | — | 1.9 (ON Time) 1.4 (OFF Time) | — | µSec |
| Video Feedthrough, (control 0 to 1.65V, freq.=10 KHz) | — | 3.0 | — | mV _{P-P} |

Table 1. Isolation Matrix (RF-COM to RF1 to RF6 Ports)

| RF Com to Port | Frequency (GHz) | Isolation, Typ. (dB) | | | | | |
|----------------|--------------------|----------------------|-----|-----|-----|-----|-----|
| | | "On" Port | | | | | |
| | | RF1 | RF2 | RF3 | RF4 | RF5 | RF6 |
| RF1 | 0.01-1.0 | - | 49 | 37 | 48 | 53 | 49 |
| RF1 | 1.0-2.0 | - | 43 | 30 | 42 | 38 | 43 |
| RF1 | 2.0-2.7 | - | 40 | 28 | 38 | 34 | 39 |
| RF2 | 0.01-1.0 | 48 | - | 48 | 38 | 48 | 50 |
| RF2 | 1.0-2.0 | 43 | - | 42 | 30 | 42 | 38 |
| RF2 | 2.0-2.7 | 39 | - | 38 | 28 | 39 | 33 |
| RF3 | 0.01-1.0 | 39 | 44 | - | 44 | 38 | 45 |
| RF3 | 1.0-2.0 | 32 | 38 | - | 38 | 30 | 39 |
| RF3 | 2.0-2.7 | 29 | 35 | - | 35 | 28 | 36 |
| RF4 | 0.01-1.0 | 44 | 39 | 44 | - | 44 | 37 |
| RF4 | 1.0-2.0 | 38 | 31 | 38 | - | 39 | 30 |
| RF4 | 2.0-2.7 | 35 | 28 | 35 | - | 36 | 27 |
| RF5 | 0.01-1.0 | 44 | 39 | 44 | 40 | - | 40 |
| RF5 | 1.0-2.0 | 33 | 34 | 31 | 34 | - | 34 |
| RF5 | 2.0-2.7 | 28 | 31 | 27 | 31 | - | 31 |
| RF6 | 0.01-1.0 | 39 | 41 | 39 | 43 | 40 | - |
| RF6 | 1.0-2.0 | 33 | 32 | 34 | 31 | 34 | - |
| RF6 | 2.0-2.7 | 31 | 28 | 31 | 27 | 31 | - |

Table 2. Isolation Matrix (Between Output Ports)

| From Port to Port | Frequency (GHz) | Isolation, Typ. (dB) | | | | | |
|-------------------|--------------------|----------------------|-----|-----|-----|-----|-----|
| | | "On" Port | | | | | |
| | | RF1 | RF2 | RF3 | RF4 | RF5 | RF6 |
| RF1 | 0.01-1.0 | - | 54 | 29 | 57 | 37 | 55 |
| RF1 | 1.0-2.0 | - | 45 | 24 | 47 | 32 | 46 |
| RF1 | 2.0-2.7 | - | 41 | 22 | 42 | 28 | 42 |
| RF2 | 0.01-1.0 | 54 | - | 57 | 29 | 55 | 37 |
| RF2 | 1.0-2.0 | 44 | - | 46 | 24 | 45 | 32 |
| RF2 | 2.0-2.7 | 40 | - | 41 | 22 | 41 | 29 |
| RF3 | 0.01-1.0 | 30 | 58 | - | 59 | 29 | 62 |
| RF3 | 1.0-2.0 | 25 | 46 | - | 46 | 24 | 46 |
| RF3 | 2.0-2.7 | 22 | 43 | - | 43 | 22 | 43 |
| RF4 | 0.01-1.0 | 58 | 30 | 58 | - | 62 | 30 |
| RF4 | 1.0-2.0 | 45 | 25 | 46 | - | 46 | 24 |
| RF4 | 2.0-2.7 | 42 | 22 | 42 | - | 42 | 22 |
| RF5 | 0.01-1.0 | 44 | 58 | 32 | 45 | - | 48 |
| RF5 | 1.0-2.0 | 37 | 45 | 26 | 38 | - | 40 |
| RF5 | 2.0-2.7 | 32 | 42 | 23 | 37 | - | 37 |
| RF6 | 0.01-1.0 | 45 | 44 | 46 | 32 | 48 | - |
| RF6 | 1.0-2.0 | 38 | 37 | 38 | 26 | 39 | - |
| RF6 | 2.0-2.7 | 36 | 32 | 36 | 23 | 37 | - |

Absolute Maximum Ratings⁽⁵⁾

| Parameter | Ratings |
|----------------------------------|---------------------|
| Operating Temperature | -40°C to +85°C |
| Storage Temperature | -55°C to 150°C |
| V _{DD} , Supply Voltage | 5.0V |
| Voltage Control | -0.5V Min. 3.0 Max. |
| RF input power ⁶ | 5 Watt |

5. Operation of this device above any of these conditions may cause permanent damage.

6. Derate linearly to 2.5W at 85°C.

Truth Table⁽⁷⁾ (State of control voltage selects the desired switch state)

| State of Control Voltages | | | RF Common to | | | | | |
|---------------------------|------------|------------|--------------|-----|-----|-----|-----|-----|
| Control #1 | Control #2 | Control #3 | RF1 | RF2 | RF3 | RF4 | RF5 | RF6 |
| L | L | L | ON | — | — | — | — | — |
| L | L | H | — | ON | — | — | — | — |
| L | H | L | — | — | ON | — | — | — |
| L | H | H | — | — | — | ON | — | — |
| H | L | L | — | — | — | — | ON | — |
| H | L | H | — | — | — | — | — | ON |
| H | H | H | Shutdown | | | | | |

7. Any control state not defined above, places the switch in an undefined state, but will not damage the switch.

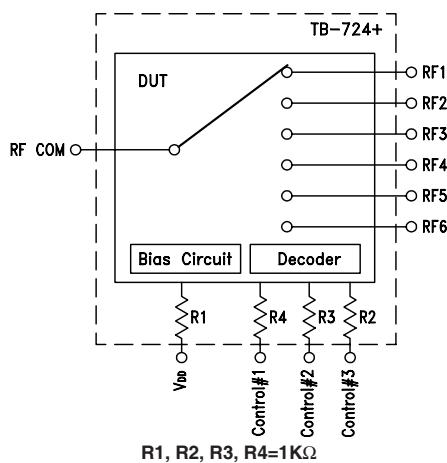
Characterization Test Circuit

Figure 1: Block Diagram Of Test Circuit Used For Characterization.
(DUT soldered on Mini-Circuits' TB-724+)

Test Equipment:**For Insertion loss, Isolation, Return loss:**

Agilent's N5230A Network Analyzer , E3631A power supply.

For Switching Time and Video Feed through

Agilent's HP81110A pulse generator, 54833A Oscilloscope, E3631A power supply.

Agilent's N9020A Spectrum Analyzer , E8257D Generator, E3631A power supply

For Compression:

R&S Network Analyzer ZVA24, E3631A power supply.

Conditions:

V_{DD}= +2.5, +3.0 and +4.8V, Control= 0 and 1.35V.

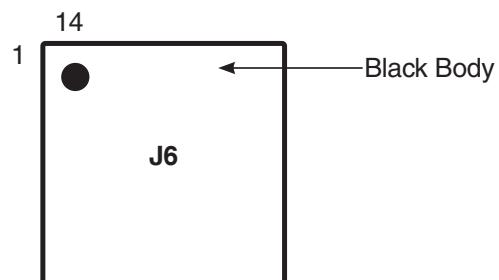
For Insertion loss, isolation and return loss: Pin=0 dBm

For Input IP3: Pin=+10dBm/tone at V_{DD}=3V

For Switching time: RF frequency: DC at 200mV, Control Frequency: 10 KHz and 0 and +8V.



Product Marking



Recommended Application Circuit

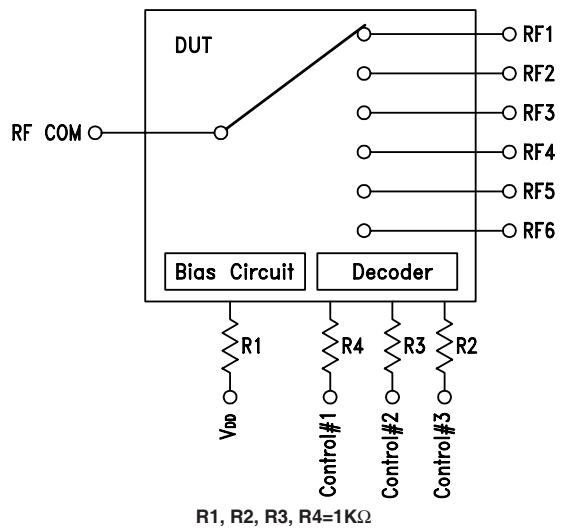


Fig. 2: Evaluation board includes case, connectors and components soldered to PCB.

Additional Detailed Technical Information

additional information is available on our dash board. To access this information [click here](#)

| | |
|--|---|
| Performance Data | Data Table |
| | Swept Graphs |
| Case Style | MT1817 <i>Plastic package; Lead finish: Matte Tin</i> |
| Tape & Reel | F108 |
| Standard quantities available on reel | 7" reels with 20, 50, 100, 200, 500, 1K or 3K devices |
| Suggested Layout for PCB Design | PL-416 |
| Evaluation Board | TB-724+ |
| Environmental Ratings | ENV75 |

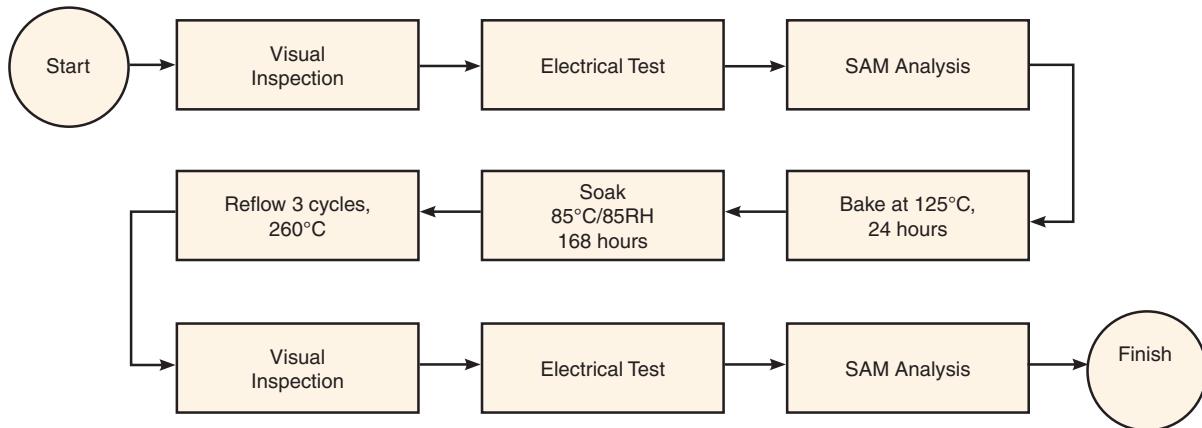
ESD Rating

Human Body Model (HBM): Class 1B (500 to < 1000V) in accordance with JESD22-A114

Machine Model (MM): Class A (Pass 100V) in accordance with JESD22-A115

MSL Rating

Moisture Sensitivity: MSL1 in accordance with IPC/JEDEC J-STD-020D

MSL Test Flow Chart**Additional Notes**

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp

Typical Performance Data

| RF FREQ (MHz) | INSERTION LOSS (dB) | | | | | | RF FREQ (MHz) | ISOLATION (dB) | | | | | | | | | | | | |
|------------------|---------------------|------------|------------|------------|------------|------------|------------------|----------------|------------|------------|------------|------------|------------|-----------|---------|---------|---------|-----------|---------|--|
| | VDD=+2.5V | | VDD=+3V | | VDD=+4.8V | | | VDD=+2.5V | | VDD=+3V | | VDD=+4.8V | | VDD=+2.5V | | VDD=+3V | | VDD=+4.8V | | |
| | RF COM-RF1 | RF COM-RF6 | RF COM-RF1 | RF COM-RF6 | RF COM-RF1 | RF COM-RF6 | | RF COM-RF1 | RF COM-RF6 | RF COM-RF1 | RF COM-RF6 | RF COM-RF1 | RF COM-RF6 | RF3-RF4 | RF3-RF5 | RF3-RF4 | RF3-RF5 | RF3-RF4 | RF3-RF5 | |
| 10.0 | 0.40 | 0.38 | 0.41 | 0.38 | 0.41 | 0.38 | 10.0 | 57.61 | 59.40 | 56.08 | 55.44 | 62.30 | 57.26 | 61.77 | 53.57 | 61.12 | 56.06 | 62.79 | 55.22 | |
| 20.0 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.41 | 20.0 | 80.10 | 70.81 | 100.60 | 82.20 | 74.87 | 71.69 | 78.23 | 65.23 | 88.19 | 67.59 | 77.79 | 65.63 | |
| 30.0 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.41 | 30.0 | 82.27 | 72.64 | 77.80 | 72.52 | 82.69 | 72.94 | 78.42 | 63.89 | 86.79 | 63.44 | 79.48 | 64.63 | |
| 40.0 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 40.0 | 78.08 | 70.57 | 76.16 | 69.19 | 82.00 | 70.31 | 81.28 | 61.96 | 89.47 | 60.90 | 85.59 | 61.55 | |
| 50.0 | 0.42 | 0.42 | 0.43 | 0.42 | 0.42 | 0.42 | 50.0 | 63.00 | 62.72 | 60.23 | 59.84 | 62.71 | 62.96 | 61.07 | 59.62 | 62.06 | 54.84 | 62.11 | 68.78 | |
| 60.0 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.41 | 60.0 | 74.59 | 62.98 | 69.68 | 67.15 | 68.23 | 63.41 | 68.32 | 57.14 | 69.03 | 55.41 | 68.21 | 59.58 | |
| 70.0 | 0.42 | 0.42 | 0.42 | 0.43 | 0.42 | 0.42 | 70.0 | 74.76 | 64.99 | 74.42 | 64.56 | 73.78 | 64.58 | 83.18 | 56.48 | 83.82 | 56.18 | 86.02 | 56.68 | |
| 80.0 | 0.42 | 0.43 | 0.43 | 0.43 | 0.42 | 0.42 | 80.0 | 72.32 | 63.92 | 71.36 | 63.15 | 72.65 | 63.66 | 80.20 | 55.36 | 81.19 | 55.40 | 84.57 | 55.20 | |
| 90.0 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.42 | 90.0 | 70.14 | 62.70 | 70.11 | 61.62 | 71.48 | 62.62 | 84.68 | 54.23 | 80.53 | 54.41 | 82.01 | 54.12 | |
| 100.0 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.42 | 100.0 | 69.12 | 61.37 | 69.72 | 61.37 | 70.08 | 61.38 | 86.27 | 53.24 | 79.86 | 53.35 | 79.59 | 53.22 | |
| 200.0 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.42 | 200.0 | 64.53 | 55.15 | 63.94 | 54.99 | 64.22 | 55.15 | 78.32 | 47.18 | 76.44 | 47.20 | 75.06 | 47.14 | |
| 300.0 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 300.0 | 60.31 | 51.47 | 60.56 | 51.54 | 60.07 | 51.47 | 72.27 | 43.61 | 71.71 | 43.60 | 71.74 | 43.66 | |
| 400.0 | 0.43 | 0.44 | 0.44 | 0.44 | 0.44 | 0.43 | 400.0 | 57.95 | 49.07 | 57.78 | 48.98 | 57.92 | 49.01 | 71.77 | 41.14 | 70.17 | 41.15 | 70.67 | 41.12 | |
| 500.0 | 0.43 | 0.44 | 0.43 | 0.44 | 0.43 | 0.43 | 500.0 | 55.98 | 46.92 | 55.73 | 46.84 | 55.78 | 46.91 | 67.83 | 39.07 | 68.43 | 39.08 | 67.48 | 39.09 | |
| 600.0 | 0.44 | 0.45 | 0.44 | 0.45 | 0.44 | 0.44 | 600.0 | 54.10 | 45.20 | 54.13 | 45.24 | 54.20 | 45.20 | 66.08 | 37.49 | 66.08 | 37.48 | 66.32 | 37.49 | |
| 700.0 | 0.44 | 0.45 | 0.44 | 0.45 | 0.44 | 0.45 | 700.0 | 52.92 | 43.70 | 52.92 | 43.69 | 53.01 | 43.69 | 64.96 | 36.05 | 65.11 | 36.04 | 64.98 | 36.03 | |
| 800.0 | 0.43 | 0.45 | 0.43 | 0.45 | 0.43 | 0.44 | 800.0 | 51.83 | 42.44 | 51.73 | 42.47 | 51.65 | 42.45 | 61.68 | 34.78 | 61.50 | 34.79 | 62.04 | 34.79 | |
| 900.0 | 0.43 | 0.45 | 0.44 | 0.45 | 0.44 | 0.45 | 900.0 | 50.63 | 41.49 | 50.75 | 41.50 | 50.72 | 41.54 | 59.20 | 33.79 | 59.23 | 33.78 | 59.11 | 33.79 | |
| 1000.0 | 0.43 | 0.45 | 0.43 | 0.45 | 0.43 | 0.45 | 1000.0 | 49.80 | 40.29 | 49.75 | 40.30 | 49.67 | 40.29 | 58.38 | 32.80 | 58.32 | 32.81 | 58.49 | 32.81 | |
| 1100.0 | 0.42 | 0.44 | 0.42 | 0.44 | 0.42 | 0.44 | 1100.0 | 49.19 | 39.39 | 49.14 | 39.39 | 49.09 | 39.40 | 57.82 | 31.84 | 57.97 | 31.84 | 58.05 | 31.84 | |
| 1200.0 | 0.42 | 0.44 | 0.43 | 0.45 | 0.43 | 0.44 | 1200.0 | 48.18 | 38.66 | 48.24 | 38.67 | 48.21 | 38.67 | 55.59 | 31.05 | 55.61 | 31.05 | 55.69 | 31.05 | |
| 1300.0 | 0.42 | 0.44 | 0.42 | 0.44 | 0.43 | 0.44 | 1300.0 | 47.68 | 37.85 | 47.69 | 37.86 | 47.58 | 37.85 | 53.39 | 30.44 | 53.42 | 30.44 | 53.42 | 30.43 | |
| 1400.0 | 0.41 | 0.43 | 0.41 | 0.43 | 0.41 | 0.43 | 1400.0 | 46.87 | 37.34 | 46.92 | 37.34 | 46.91 | 37.36 | 52.54 | 29.74 | 52.52 | 29.74 | 52.68 | 29.74 | |
| 1500.0 | 0.41 | 0.43 | 0.41 | 0.43 | 0.41 | 0.43 | 1500.0 | 46.07 | 36.59 | 46.07 | 36.60 | 46.09 | 36.60 | 51.24 | 29.22 | 51.34 | 29.22 | 51.40 | 29.22 | |
| 1600.0 | 0.42 | 0.43 | 0.42 | 0.43 | 0.42 | 0.43 | 1600.0 | 45.93 | 36.08 | 45.91 | 36.07 | 45.89 | 36.09 | 51.03 | 28.59 | 51.03 | 28.58 | 51.08 | 28.60 | |
| 1700.0 | 0.40 | 0.42 | 0.40 | 0.43 | 0.41 | 0.42 | 1700.0 | 44.93 | 35.75 | 44.93 | 35.74 | 45.11 | 35.73 | 49.69 | 28.13 | 49.71 | 28.13 | 49.71 | 28.14 | |
| 1800.0 | 0.40 | 0.42 | 0.40 | 0.42 | 0.40 | 0.41 | 1800.0 | 44.96 | 35.26 | 44.98 | 35.24 | 44.99 | 35.26 | 48.08 | 27.86 | 48.05 | 27.86 | 47.99 | 27.86 | |
| 1900.0 | 0.40 | 0.43 | 0.40 | 0.43 | 0.41 | 0.42 | 1900.0 | 44.23 | 34.93 | 44.22 | 34.94 | 44.17 | 34.94 | 47.84 | 27.30 | 47.80 | 27.30 | 47.74 | 27.30 | |
| 2000.0 | 0.40 | 0.42 | 0.40 | 0.42 | 0.40 | 0.42 | 2000.0 | 43.18 | 34.47 | 43.24 | 34.47 | 43.30 | 34.46 | 46.49 | 27.01 | 46.47 | 27.01 | 46.39 | 27.02 | |
| 2100.0 | 0.37 | 0.40 | 0.37 | 0.40 | 0.38 | 0.40 | 2100.0 | 43.16 | 33.99 | 43.14 | 33.99 | 43.17 | 33.99 | 46.15 | 26.42 | 46.15 | 26.42 | 46.16 | 26.43 | |
| 2200.0 | 0.38 | 0.41 | 0.38 | 0.41 | 0.38 | 0.40 | 2200.0 | 42.15 | 33.85 | 42.23 | 33.86 | 42.27 | 33.85 | 46.28 | 26.06 | 46.27 | 26.06 | 46.32 | 26.08 | |
| 2300.0 | 0.37 | 0.40 | 0.37 | 0.40 | 0.38 | 0.39 | 2300.0 | 41.71 | 33.17 | 41.73 | 33.16 | 41.52 | 33.17 | 43.89 | 25.97 | 43.89 | 25.97 | 43.91 | 25.99 | |
| 2400.0 | 0.35 | 0.37 | 0.35 | 0.37 | 0.35 | 0.37 | 2400.0 | 41.31 | 32.75 | 41.33 | 32.72 | 41.46 | 32.71 | 44.19 | 25.19 | 44.18 | 25.19 | 44.33 | 25.20 | |
| 2500.0 | 0.35 | 0.36 | 0.35 | 0.37 | 0.36 | 0.36 | 2500.0 | 40.93 | 32.38 | 40.93 | 32.39 | 40.82 | 32.39 | 44.19 | 24.95 | 44.24 | 24.95 | 44.28 | 24.95 | |
| 2600.0 | 0.34 | 0.36 | 0.35 | 0.36 | 0.35 | 0.36 | 2600.0 | 40.14 | 31.68 | 40.15 | 31.68 | 40.16 | 31.66 | 42.56 | 24.55 | 42.57 | 24.55 | 42.64 | 24.53 | |
| 2700.0 | 0.34 | 0.35 | 0.34 | 0.35 | 0.35 | 0.35 | 2700.0 | 39.99 | 31.38 | 40.00 | 31.39 | 39.85 | 31.41 | 43.56 | 23.96 | 43.55 | 23.96 | 43.46 | 23.97 | |
| 2800.0 | 0.36 | 0.38 | 0.36 | 0.38 | 0.36 | 0.38 | 2800.0 | 39.34 | 31.02 | 39.32 | 31.03 | 39.22 | 31.04 | 42.79 | 23.92 | 42.77 | 23.93 | 42.72 | 23.93 | |



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Typical Performance Data

| RF FREQ (MHz) | VSWR (:1) (ON STATE) | | | | | | | | | | | | RF FREQ (MHz) | VSWR (:1) (OFF STATE) | | | | | | | | | | | | | | | | | | |
|------------------|-------------------------|------|------|---------|------|------|-----------|------|------|-----------|------|--------|------------------|--------------------------|--------|------|-----------|------|--------|------|------|--------|--------|--------|--------|--------|------|------|------|------|------|------|
| | VDD=+2.5V | | | VDD=+3V | | | VDD=+4.8V | | | VDD=+2.5V | | | | VDD=+3V | | | VDD=+4.8V | | | RF1 | RF6 | RF1 | RF6 | RF1 | RF6 | | | | | | | |
| | RF COM | RF1 | RF6 | RF COM | RF1 | RF6 | RF COM | RF1 | RF6 | RF1 | RF6 | RF2 ON | RF1 ON | RF2 ON | RF1 ON | RF1 | RF6 | RF1 | RF6 | RF1 | RF6 | RF2 ON | RF1 ON | RF2 ON | RF1 ON | RF1 | RF6 | | | | | |
| 10.0 | 1.07 | 1.06 | 1.07 | 1.06 | 1.06 | 1.07 | 1.06 | 1.07 | 1.06 | 1.07 | 1.06 | 10.0 | 3.37 | 3.40 | 3.37 | 3.40 | 3.36 | 3.38 | 20.0 | 3.35 | 3.39 | 3.35 | 3.38 | 3.34 | 3.37 | 30.0 | 3.35 | 3.40 | 3.35 | 3.40 | 3.34 | 3.38 |
| 20.0 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 20.0 | 3.35 | 3.39 | 3.35 | 3.38 | 3.34 | 3.37 | 30.0 | 3.35 | 3.40 | 3.35 | 3.40 | 3.34 | 3.38 | 40.0 | 3.35 | 3.39 | 3.35 | 3.39 | 3.34 | 3.38 |
| 30.0 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 30.0 | 3.35 | 3.40 | 3.35 | 3.40 | 3.34 | 3.38 | 40.0 | 3.35 | 3.39 | 3.35 | 3.39 | 3.34 | 3.38 | 50.0 | 3.35 | 3.38 | 3.35 | 3.38 | 3.34 | 3.36 |
| 40.0 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 1.06 | 40.0 | 3.35 | 3.39 | 3.35 | 3.39 | 3.34 | 3.38 | 50.0 | 3.35 | 3.38 | 3.35 | 3.38 | 3.34 | 3.36 | 60.0 | 3.35 | 3.37 | 3.35 | 3.36 | 3.34 | 3.35 |
| 50.0 | 1.07 | 1.07 | 1.06 | 1.06 | 1.06 | 1.07 | 1.06 | 1.06 | 1.07 | 1.06 | 1.06 | 50.0 | 3.35 | 3.38 | 3.35 | 3.38 | 3.34 | 3.36 | 60.0 | 3.34 | 3.37 | 3.34 | 3.36 | 3.33 | 3.35 | 70.0 | 3.34 | 3.37 | 3.34 | 3.36 | 3.33 | 3.35 |
| 60.0 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.06 | 1.06 | 70.0 | 3.34 | 3.37 | 3.34 | 3.36 | 3.33 | 3.35 | 80.0 | 3.34 | 3.38 | 3.34 | 3.36 | 3.33 | 3.35 | 90.0 | 3.34 | 3.39 | 3.34 | 3.38 | 3.33 | 3.37 |
| 70.0 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.06 | 1.06 | 100.0 | 3.34 | 3.39 | 3.34 | 3.38 | 3.33 | 3.37 | 100.0 | 3.34 | 3.39 | 3.34 | 3.38 | 3.33 | 3.37 | 200.0 | 3.33 | 3.35 | 3.33 | 3.34 | 3.31 | 3.33 |
| 80.0 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.06 | 1.06 | 300.0 | 3.31 | 3.34 | 3.31 | 3.34 | 3.30 | 3.29 | 400.0 | 3.31 | 3.30 | 3.31 | 3.29 | 3.30 | 3.28 | 500.0 | 3.30 | 3.26 | 3.30 | 3.25 | 3.29 | 3.24 |
| 90.0 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.06 | 1.06 | 600.0 | 3.27 | 3.21 | 3.27 | 3.21 | 3.21 | 3.26 | 700.0 | 3.26 | 3.16 | 3.26 | 3.15 | 3.25 | 3.14 | 800.0 | 3.25 | 3.15 | 3.25 | 3.15 | 3.23 | 3.13 |
| 100.0 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.07 | 1.06 | 1.06 | 1.07 | 1.06 | 1.06 | 900.0 | 3.21 | 3.08 | 3.22 | 3.08 | 3.21 | 3.06 | 1000.0 | 3.22 | 3.06 | 3.22 | 3.06 | 3.20 | 3.05 | 1100.0 | 3.22 | 3.02 | 3.21 | 3.02 | 3.20 | 3.01 |
| 1200.0 | 1.12 | 1.11 | 1.07 | 1.15 | 1.12 | 1.13 | 1.08 | 1.15 | 1.13 | 1.13 | 1.13 | 1200.0 | 3.20 | 3.03 | 3.21 | 3.03 | 3.20 | 3.02 | 1300.0 | 3.20 | 3.01 | 3.20 | 3.01 | 3.18 | 3.00 | 1400.0 | 3.20 | 3.02 | 3.20 | 3.01 | 3.19 | 3.00 |
| 1500.0 | 1.12 | 1.11 | 1.06 | 1.14 | 1.12 | 1.12 | 1.06 | 1.14 | 1.12 | 1.12 | 1.12 | 1500.0 | 3.22 | 3.02 | 3.22 | 3.02 | 3.21 | 3.02 | 1600.0 | 3.22 | 3.02 | 3.22 | 3.02 | 3.20 | 3.00 | 1700.0 | 3.23 | 3.08 | 3.24 | 3.09 | 3.23 | 3.07 |
| 1800.0 | 1.10 | 1.05 | 1.05 | 1.12 | 1.10 | 1.05 | 1.05 | 1.12 | 1.10 | 1.05 | 1.05 | 1800.0 | 3.29 | 3.15 | 3.29 | 3.15 | 3.27 | 3.14 | 1900.0 | 3.29 | 3.22 | 3.30 | 3.22 | 3.29 | 3.20 | 2000.0 | 3.34 | 3.26 | 3.34 | 3.26 | 3.33 | 3.25 |
| 2100.0 | 1.18 | 1.17 | 1.15 | 1.19 | 1.18 | 1.17 | 1.15 | 1.19 | 1.18 | 1.17 | 1.15 | 2100.0 | 3.42 | 3.40 | 3.41 | 3.41 | 3.39 | 3.39 | 2200.0 | 3.40 | 3.50 | 3.42 | 3.50 | 3.41 | 3.48 | 2300.0 | 3.47 | 3.57 | 3.45 | 3.56 | 3.43 | 3.56 |
| 2400.0 | 1.05 | 1.07 | 1.12 | 1.13 | 1.06 | 1.07 | 1.12 | 1.13 | 1.05 | 1.07 | 1.11 | 2400.0 | 3.49 | 3.62 | 3.50 | 3.62 | 3.60 | 3.60 | 2500.0 | 3.47 | 3.73 | 3.48 | 3.72 | 3.45 | 3.70 | 2600.0 | 3.52 | 3.80 | 3.51 | 3.81 | 3.49 | 3.78 |
| 2700.0 | 1.08 | 1.07 | 1.15 | 1.10 | 1.08 | 1.07 | 1.14 | 1.10 | 1.08 | 1.07 | 1.14 | 2700.0 | 3.54 | 3.79 | 3.56 | 3.77 | 3.54 | 3.76 | 2800.0 | 3.54 | 3.79 | 3.52 | 3.79 | 3.50 | 3.77 | 2800.0 | 3.54 | 3.79 | 3.52 | 3.79 | 3.50 | 3.77 |
| 2900.0 | 1.11 | 1.16 | 1.11 | 1.10 | 1.11 | 1.16 | 1.11 | 1.11 | 1.11 | 1.11 | 1.11 | 2900.0 | 3.54 | 3.79 | 3.52 | 3.79 | 3.50 | 3.77 | 3000.0 | 3.54 | 3.79 | 3.52 | 3.79 | 3.50 | 3.77 | 3100.0 | 3.54 | 3.79 | 3.52 | 3.79 | 3.50 | 3.77 |

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Typical Performance Data

| RF FREQ (MHz) | INPUT IP3 (dBm) | | RF FREQ (MHz) | COMPRESSION (dB) @ FIXED POWER FOR PIN=34.5dBm | | |
|------------------|--------------------|------------|------------------|--|------------|--|
| | VDD=+3V | | | VDD=+3V | | |
| | RF COM-RF1 | RF COM-RF6 | | RF COM-RF1 | RF COM-RF6 | |
| 10.1 | 55.53 | 56.04 | 10.0 | -0.03 | 0.02 | |
| 250.1 | 58.87 | 58.43 | 20.0 | 0.08 | 0.08 | |
| 500.1 | 54.96 | 54.72 | 30.0 | -0.05 | 0.03 | |
| 1000.1 | 66.99 | 66.16 | 40.0 | -0.02 | 0.00 | |
| 1500.1 | 61.74 | 61.53 | 50.0 | 0.03 | 0.04 | |
| 2000.1 | 61.54 | 63.51 | 60.0 | 0.01 | 0.02 | |
| 2500.1 | 59.45 | 60.55 | 70.0 | 0.01 | 0.01 | |
| 3000.1 | 61.24 | 61.12 | 80.0 | 0.00 | 0.03 | |
| | | | 90.0 | 0.01 | 0.01 | |
| | | | 100.0 | 0.00 | 0.01 | |
| | | | 200.0 | 0.01 | 0.00 | |
| | | | 300.0 | 0.00 | 0.01 | |
| | | | 400.0 | 0.01 | 0.00 | |
| | | | 500.0 | 0.00 | 0.00 | |
| | | | 600.0 | 0.00 | 0.00 | |
| | | | 700.0 | -0.01 | 0.00 | |
| | | | 800.0 | -0.01 | -0.01 | |
| | | | 900.0 | -0.02 | 0.00 | |
| | | | 1000.0 | -0.01 | -0.02 | |
| | | | 1100.0 | -0.01 | -0.01 | |
| | | | 1200.0 | -0.01 | -0.03 | |
| | | | 1300.0 | -0.01 | -0.02 | |
| | | | 1400.0 | -0.01 | -0.02 | |
| | | | 1500.0 | -0.02 | -0.02 | |
| | | | 1600.0 | -0.01 | -0.02 | |
| | | | 1700.0 | -0.02 | -0.02 | |
| | | | 1800.0 | -0.02 | -0.02 | |
| | | | 1900.0 | 0.00 | -0.01 | |
| | | | 2000.0 | -0.01 | -0.01 | |
| | | | 2100.0 | -0.01 | -0.01 | |
| | | | 2200.0 | 0.00 | -0.02 | |
| | | | 2300.0 | 0.00 | -0.02 | |
| | | | 2400.0 | 0.00 | -0.01 | |
| | | | 2500.0 | 0.00 | -0.01 | |
| | | | 2600.0 | 0.01 | -0.01 | |
| | | | 2700.0 | 0.01 | 0.01 | |
| | | | 2800.0 | 0.01 | 0.01 | |

Typical Performance Data

| RF FREQ (MHz) | INSERTION LOSS (dB) @ VDD=+3V OVER TEMPERATURE | | | | | | ISOLATION (dB) @ VDD=+3V OVER TEMPERATURE | | | | | | | | | | | | |
|------------------|--|-------|-------|------------|-------|-------|---|-------|--------|------------------------|-------|-------|---------------------|-------|-------|---------------------|-------|-------|-------|
| | RF COM-RF1 | | | RF COM-RF6 | | | RF COM-RF1 (RF2 ON) | | | RF COM-RF6 (RF5 ON) | | | RF3-RF4 (RF3 ON) | | | RF3-RF5 (RF3 ON) | | | |
| | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | |
| 10.0 | 0.31 | 0.41 | 0.48 | 0.30 | 0.38 | 0.46 | 10.0 | 61.53 | 56.08 | 56.20 | 55.71 | 55.44 | 62.48 | 59.55 | 61.12 | 56.02 | 58.43 | 56.06 | 59.04 |
| 20.0 | 0.33 | 0.42 | 0.50 | 0.34 | 0.42 | 0.50 | 20.0 | 80.56 | 100.60 | 83.18 | 75.77 | 82.20 | 76.93 | 85.00 | 88.19 | 84.61 | 66.63 | 67.59 | 66.61 |
| 30.0 | 0.33 | 0.42 | 0.50 | 0.34 | 0.42 | 0.50 | 30.0 | 95.14 | 77.80 | 78.13 | 72.29 | 72.52 | 71.56 | 80.60 | 86.79 | 83.74 | 64.57 | 63.44 | 63.05 |
| 40.0 | 0.33 | 0.42 | 0.50 | 0.35 | 0.42 | 0.50 | 40.0 | 80.15 | 76.16 | 74.29 | 69.52 | 69.19 | 68.94 | 83.01 | 89.47 | 81.96 | 60.76 | 60.90 | 60.28 |
| 50.0 | 0.34 | 0.43 | 0.50 | 0.35 | 0.42 | 0.50 | 50.0 | 61.71 | 60.23 | 59.63 | 58.06 | 59.84 | 61.86 | 62.10 | 62.06 | 61.03 | 56.32 | 54.84 | 56.21 |
| 60.0 | 0.34 | 0.42 | 0.50 | 0.35 | 0.42 | 0.49 | 60.0 | 73.60 | 69.68 | 65.74 | 62.27 | 67.15 | 72.97 | 72.26 | 69.03 | 67.93 | 58.21 | 55.41 | 58.05 |
| 70.0 | 0.34 | 0.42 | 0.50 | 0.35 | 0.43 | 0.50 | 70.0 | 78.65 | 74.42 | 71.47 | 64.87 | 64.56 | 64.88 | 78.83 | 83.82 | 90.55 | 56.77 | 56.18 | 56.11 |
| 80.0 | 0.35 | 0.43 | 0.50 | 0.36 | 0.43 | 0.50 | 80.0 | 73.84 | 71.36 | 69.73 | 63.42 | 63.15 | 62.82 | 76.72 | 81.19 | 91.36 | 55.52 | 55.40 | 54.82 |
| 90.0 | 0.35 | 0.43 | 0.50 | 0.36 | 0.43 | 0.50 | 90.0 | 72.17 | 70.11 | 69.55 | 62.99 | 61.62 | 61.53 | 74.63 | 80.53 | 83.68 | 54.44 | 54.41 | 53.98 |
| 100.0 | 0.35 | 0.43 | 0.50 | 0.36 | 0.43 | 0.50 | 100.0 | 71.17 | 69.72 | 69.19 | 61.96 | 61.37 | 60.92 | 76.25 | 79.86 | 87.30 | 53.75 | 53.35 | 53.08 |
| 200.0 | 0.35 | 0.43 | 0.51 | 0.36 | 0.43 | 0.51 | 200.0 | 65.94 | 63.94 | 62.68 | 55.11 | 54.99 | 54.95 | 70.42 | 76.44 | 94.73 | 47.47 | 47.20 | 46.95 |
| 300.0 | 0.36 | 0.43 | 0.53 | 0.35 | 0.43 | 0.53 | 300.0 | 62.27 | 60.56 | 59.31 | 51.44 | 51.54 | 51.51 | 68.23 | 71.71 | 75.94 | 43.96 | 43.60 | 43.47 |
| 400.0 | 0.37 | 0.44 | 0.54 | 0.35 | 0.44 | 0.54 | 400.0 | 59.07 | 57.78 | 56.66 | 49.13 | 48.98 | 48.78 | 65.20 | 70.17 | 75.78 | 41.34 | 41.15 | 40.86 |
| 500.0 | 0.38 | 0.43 | 0.54 | 0.34 | 0.44 | 0.55 | 500.0 | 57.00 | 55.73 | 54.57 | 46.97 | 46.84 | 46.73 | 63.38 | 68.43 | 72.59 | 39.28 | 39.08 | 38.92 |
| 600.0 | 0.40 | 0.44 | 0.56 | 0.34 | 0.45 | 0.56 | 600.0 | 55.37 | 54.13 | 53.01 | 45.27 | 45.24 | 45.15 | 61.76 | 66.08 | 69.77 | 37.66 | 37.48 | 37.23 |
| 700.0 | 0.40 | 0.44 | 0.56 | 0.33 | 0.45 | 0.57 | 700.0 | 53.90 | 52.92 | 51.93 | 43.69 | 43.69 | 43.66 | 60.46 | 65.11 | 69.68 | 36.16 | 36.04 | 35.85 |
| 800.0 | 0.39 | 0.43 | 0.56 | 0.32 | 0.45 | 0.57 | 800.0 | 52.68 | 51.73 | 50.69 | 42.47 | 42.47 | 42.46 | 57.87 | 61.50 | 65.80 | 34.88 | 34.79 | 34.66 |
| 900.0 | 0.41 | 0.44 | 0.57 | 0.32 | 0.45 | 0.59 | 900.0 | 51.71 | 50.75 | 49.72 | 41.55 | 41.50 | 41.48 | 56.21 | 59.23 | 62.16 | 33.90 | 33.78 | 33.62 |
| 1000.0 | 0.39 | 0.43 | 0.58 | 0.31 | 0.45 | 0.59 | 1000.0 | 50.60 | 49.75 | 48.67 | 40.24 | 40.30 | 40.30 | 55.71 | 58.32 | 60.39 | 32.90 | 32.81 | 32.65 |
| 1100.0 | 0.37 | 0.42 | 0.57 | 0.30 | 0.44 | 0.59 | 1100.0 | 50.12 | 49.14 | 48.19 | 39.32 | 39.39 | 39.46 | 54.89 | 57.97 | 60.23 | 31.87 | 31.84 | 31.75 |
| 1200.0 | 0.37 | 0.43 | 0.58 | 0.30 | 0.45 | 0.59 | 1200.0 | 49.15 | 48.24 | 47.26 | 38.58 | 38.67 | 38.74 | 52.90 | 55.61 | 58.19 | 31.07 | 31.05 | 31.00 |
| 1300.0 | 0.37 | 0.42 | 0.59 | 0.29 | 0.44 | 0.60 | 1300.0 | 48.57 | 47.69 | 46.56 | 37.72 | 37.86 | 37.95 | 51.35 | 53.42 | 55.25 | 30.43 | 30.44 | 30.37 |
| 1400.0 | 0.34 | 0.41 | 0.58 | 0.27 | 0.43 | 0.59 | 1400.0 | 47.89 | 46.92 | 45.92 | 37.25 | 37.34 | 37.44 | 50.66 | 52.52 | 54.10 | 29.73 | 29.74 | 29.72 |
| 1500.0 | 0.33 | 0.41 | 0.58 | 0.27 | 0.43 | 0.60 | 1500.0 | 46.92 | 46.07 | 45.24 | 36.45 | 36.60 | 36.72 | 49.56 | 51.34 | 52.69 | 29.21 | 29.22 | 29.20 |
| 1600.0 | 0.34 | 0.42 | 0.60 | 0.26 | 0.43 | 0.60 | 1600.0 | 46.85 | 45.91 | 44.83 | 35.95 | 36.07 | 36.16 | 49.37 | 51.03 | 52.06 | 28.55 | 28.58 | 28.58 |
| 1700.0 | 0.33 | 0.40 | 0.59 | 0.26 | 0.43 | 0.60 | 1700.0 | 45.97 | 44.93 | 44.21 | 35.65 | 35.74 | 35.84 | 48.03 | 49.71 | 51.10 | 28.09 | 28.13 | 28.16 |
| 1800.0 | 0.32 | 0.40 | 0.58 | 0.24 | 0.42 | 0.60 | 1800.0 | 45.98 | 44.98 | 43.98 | 35.13 | 35.24 | 35.33 | 46.63 | 48.05 | 49.04 | 27.87 | 27.86 | 27.79 |
| 1900.0 | 0.35 | 0.40 | 0.60 | 0.25 | 0.43 | 0.61 | 1900.0 | 45.20 | 44.22 | 43.26 | 34.86 | 34.94 | 34.99 | 46.50 | 47.80 | 48.81 | 27.26 | 27.30 | 27.26 |
| 2000.0 | 0.34 | 0.40 | 0.59 | 0.24 | 0.42 | 0.60 | 2000.0 | 43.96 | 43.24 | 42.37 | 34.38 | 34.47 | 34.52 | 45.32 | 46.47 | 47.20 | 27.02 | 27.01 | 26.95 |
| 2100.0 | 0.30 | 0.37 | 0.57 | 0.22 | 0.40 | 0.59 | 2100.0 | 44.17 | 43.14 | 42.27 | 33.92 | 33.99 | 34.03 | 45.26 | 46.15 | 46.71 | 26.41 | 26.42 | 26.38 |
| 2200.0 | 0.32 | 0.38 | 0.59 | 0.22 | 0.41 | 0.60 | 2200.0 | 43.16 | 42.23 | 41.24 | 33.83 | 33.86 | 33.83 | 45.02 | 46.27 | 47.38 | 26.03 | 26.06 | 26.01 |
| 2300.0 | 0.30 | 0.37 | 0.58 | 0.21 | 0.40 | 0.59 | 2300.0 | 42.28 | 41.73 | 40.70 | 33.12 | 33.16 | 33.17 | 43.12 | 43.89 | 44.60 | 26.03 | 25.97 | 25.85 |
| 2400.0 | 0.24 | 0.35 | 0.57 | 0.18 | 0.37 | 0.57 | 2400.0 | 42.31 | 41.33 | 40.54 | 32.69 | 32.72 | 32.73 | 43.63 | 44.18 | 44.69 | 25.22 | 25.19 | 25.15 |
| 2500.0 | 0.23 | 0.35 | 0.57 | 0.17 | 0.37 | 0.58 | 2500.0 | 41.65 | 40.93 | 40.10 | 32.34 | 32.39 | 32.40 | 43.30 | 44.24 | 44.86 | 24.95 | 24.95 | 24.90 |
| 2600.0 | 0.22 | 0.35 | 0.57 | 0.16 | 0.36 | 0.57 | 2600.0 | 40.77 | 40.15 | 39.53 | 31.59 | 31.68 | 31.72 | 41.92 | 42.57 | 42.98 | 24.49 | 24.55 | 24.48 |
| 2700.0 | 0.19 | 0.34 | 0.58 | 0.15 | 0.35 | 0.58 | 2700.0 | 40.57 | 40.00 | 39.29 | 31.32 | 31.39 | 31.45 | 42.70 | 43.55 | 43.95 | 23.96 | 23.96 | 23.96 |
| 2800.0 | 0.20 | 0.36 | 0.61 | 0.16 | 0.38 | 0.61 | 2800.0 | 39.88 | 39.32 | 38.70 | 30.88 | 31.03 | 31.13 | 41.75 | 42.77 | 43.51 | 23.89 | 23.93 | 23.90 |



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IF/RF MICROWAVE COMPONENTS



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3/18/2014
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Typical Performance Data

| RF FREQ (MHz) | VSWR (:1) @ VDD=+3V OVER TEMPERATURE (ON STATE) | | | | | | | | | | | | RF FREQ (MHz) | VSWR (:1) @ VDD=+3V OVER TEMPERATURE (OFF STATE) | | | | | | | |
|------------------|--|-------|-------|----------|-------|-------|----------|-------|-------|----------|-------|-------|------------------|---|-------|-------|----------|-------|-------|--|--|
| | RF COM | | | | | | RF1 | | | RF6 | | | | RF1 | | | RF6 | | | | |
| | (RF1 ON) | | | (RF6 ON) | | | (RF1 ON) | | | (RF6 ON) | | | | (RF2 ON) | | | (RF1 ON) | | | | |
| | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | | |
| 10.0 | 1.06 | 1.06 | 1.08 | 1.05 | 1.07 | 1.07 | 1.06 | 1.07 | 1.08 | 1.05 | 1.06 | 1.07 | 10.0 | 4.31 | 3.37 | 2.67 | 4.37 | 3.40 | 2.69 | | |
| 20.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 20.0 | 4.27 | 3.35 | 2.66 | 4.34 | 3.38 | 2.68 | | |
| 30.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 30.0 | 4.27 | 3.35 | 2.66 | 4.35 | 3.40 | 2.68 | | |
| 40.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 40.0 | 4.27 | 3.35 | 2.66 | 4.35 | 3.39 | 2.68 | | |
| 50.0 | 1.05 | 1.06 | 1.09 | 1.05 | 1.07 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 50.0 | 4.26 | 3.35 | 2.66 | 4.33 | 3.38 | 2.68 | | |
| 60.0 | 1.05 | 1.07 | 1.09 | 1.06 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 60.0 | 4.26 | 3.35 | 2.66 | 4.32 | 3.36 | 2.68 | | |
| 70.0 | 1.05 | 1.07 | 1.09 | 1.06 | 1.07 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 70.0 | 4.25 | 3.34 | 2.66 | 4.32 | 3.36 | 2.68 | | |
| 80.0 | 1.05 | 1.07 | 1.08 | 1.05 | 1.07 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 80.0 | 4.25 | 3.34 | 2.66 | 4.32 | 3.38 | 2.68 | | |
| 90.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 90.0 | 4.24 | 3.34 | 2.66 | 4.33 | 3.39 | 2.68 | | |
| 100.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.04 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 100.0 | 4.24 | 3.34 | 2.67 | 4.33 | 3.39 | 2.69 | | |
| 200.0 | 1.05 | 1.07 | 1.08 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 200.0 | 4.22 | 3.33 | 2.66 | 4.28 | 3.34 | 2.67 | | |
| 300.0 | 1.06 | 1.08 | 1.10 | 1.08 | 1.09 | 1.11 | 1.06 | 1.08 | 1.10 | 1.08 | 1.10 | 1.12 | 300.0 | 4.23 | 3.31 | 2.63 | 4.29 | 3.34 | 2.64 | | |
| 400.0 | 1.08 | 1.10 | 1.12 | 1.10 | 1.11 | 1.13 | 1.05 | 1.07 | 1.09 | 1.09 | 1.11 | 1.12 | 400.0 | 4.23 | 3.31 | 2.63 | 4.24 | 3.29 | 2.61 | | |
| 500.0 | 1.08 | 1.09 | 1.11 | 1.09 | 1.11 | 1.12 | 1.07 | 1.08 | 1.10 | 1.11 | 1.13 | 1.15 | 500.0 | 4.22 | 3.30 | 2.61 | 4.20 | 3.25 | 2.57 | | |
| 600.0 | 1.10 | 1.12 | 1.14 | 1.12 | 1.14 | 1.15 | 1.08 | 1.10 | 1.12 | 1.14 | 1.16 | 1.18 | 600.0 | 4.20 | 3.27 | 2.58 | 4.15 | 3.21 | 2.53 | | |
| 700.0 | 1.11 | 1.13 | 1.14 | 1.12 | 1.13 | 1.14 | 1.06 | 1.08 | 1.09 | 1.13 | 1.15 | 1.16 | 700.0 | 4.21 | 3.26 | 2.56 | 4.10 | 3.15 | 2.48 | | |
| 800.0 | 1.09 | 1.10 | 1.12 | 1.11 | 1.12 | 1.12 | 1.07 | 1.09 | 1.10 | 1.14 | 1.15 | 1.17 | 800.0 | 4.19 | 3.25 | 2.56 | 4.08 | 3.15 | 2.47 | | |
| 900.0 | 1.10 | 1.12 | 1.14 | 1.13 | 1.14 | 1.15 | 1.08 | 1.09 | 1.11 | 1.16 | 1.17 | 1.19 | 900.0 | 4.16 | 3.22 | 2.53 | 4.01 | 3.08 | 2.43 | | |
| 1000.0 | 1.10 | 1.12 | 1.14 | 1.11 | 1.12 | 1.13 | 1.05 | 1.06 | 1.07 | 1.13 | 1.14 | 1.15 | 1000.0 | 4.19 | 3.22 | 2.51 | 4.00 | 3.06 | 2.39 | | |
| 1100.0 | 1.08 | 1.09 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.06 | 1.07 | 1.14 | 1.15 | 1.16 | 1100.0 | 4.18 | 3.21 | 2.53 | 3.95 | 3.02 | 2.37 | | |
| 1200.0 | 1.11 | 1.12 | 1.13 | 1.12 | 1.12 | 1.11 | 1.07 | 1.07 | 1.07 | 1.14 | 1.15 | 1.16 | 1200.0 | 4.17 | 3.21 | 2.53 | 3.97 | 3.03 | 2.39 | | |
| 1300.0 | 1.12 | 1.13 | 1.15 | 1.09 | 1.09 | 1.11 | 1.04 | 1.03 | 1.03 | 1.10 | 1.10 | 1.10 | 1300.0 | 4.17 | 3.20 | 2.51 | 3.91 | 3.01 | 2.38 | | |
| 1400.0 | 1.06 | 1.08 | 1.11 | 1.04 | 1.03 | 1.04 | 1.02 | 1.04 | 1.07 | 1.10 | 1.12 | 1.13 | 1400.0 | 4.17 | 3.20 | 2.52 | 3.92 | 3.01 | 2.39 | | |
| 1500.0 | 1.09 | 1.10 | 1.11 | 1.07 | 1.06 | 1.06 | 1.03 | 1.03 | 1.04 | 1.10 | 1.12 | 1.13 | 1500.0 | 4.19 | 3.22 | 2.56 | 3.93 | 3.02 | 2.39 | | |
| 1600.0 | 1.14 | 1.15 | 1.17 | 1.06 | 1.08 | 1.09 | 1.05 | 1.03 | 1.03 | 1.04 | 1.07 | 1.09 | 1600.0 | 4.19 | 3.22 | 2.55 | 3.93 | 3.01 | 2.39 | | |
| 1700.0 | 1.10 | 1.12 | 1.14 | 1.06 | 1.08 | 1.10 | 1.07 | 1.08 | 1.11 | 1.12 | 1.13 | 1.16 | 1700.0 | 4.22 | 3.24 | 2.56 | 3.98 | 3.09 | 2.43 | | |
| 1800.0 | 1.08 | 1.10 | 1.10 | 1.04 | 1.05 | 1.06 | 1.04 | 1.05 | 1.06 | 1.09 | 1.12 | 1.14 | 1800.0 | 4.24 | 3.29 | 2.62 | 4.07 | 3.14 | 2.51 | | |
| 1900.0 | 1.17 | 1.17 | 1.18 | 1.14 | 1.14 | 1.14 | 1.10 | 1.09 | 1.08 | 1.11 | 1.12 | 1.12 | 1900.0 | 4.27 | 3.30 | 2.62 | 4.18 | 3.22 | 2.57 | | |
| 2000.0 | 1.17 | 1.18 | 1.17 | 1.17 | 1.17 | 1.16 | 1.15 | 1.15 | 1.14 | 1.18 | 1.19 | 1.19 | 2000.0 | 4.34 | 3.34 | 2.65 | 4.25 | 3.26 | 2.60 | | |
| 2100.0 | 1.09 | 1.10 | 1.09 | 1.11 | 1.10 | 1.09 | 1.10 | 1.10 | 1.09 | 1.15 | 1.15 | 1.16 | 2100.0 | 4.40 | 3.41 | 2.71 | 4.40 | 3.39 | 2.69 | | |
| 2200.0 | 1.16 | 1.16 | 1.15 | 1.17 | 1.17 | 1.16 | 1.12 | 1.11 | 1.08 | 1.16 | 1.15 | 1.13 | 2200.0 | 4.42 | 3.42 | 2.70 | 4.47 | 3.50 | 2.77 | | |
| 2300.0 | 1.17 | 1.16 | 1.14 | 1.20 | 1.18 | 1.16 | 1.17 | 1.16 | 1.13 | 1.21 | 1.19 | 1.17 | 2300.0 | 4.51 | 3.45 | 2.74 | 4.69 | 3.56 | 2.81 | | |
| 2400.0 | 1.07 | 1.06 | 1.03 | 1.08 | 1.07 | 1.05 | 1.12 | 1.12 | 1.11 | 1.13 | 1.13 | 1.12 | 2400.0 | 4.54 | 3.50 | 2.76 | 4.74 | 3.62 | 2.86 | | |
| 2500.0 | 1.07 | 1.06 | 1.07 | 1.09 | 1.10 | 1.11 | 1.08 | 1.07 | 1.06 | 1.09 | 1.07 | 1.05 | 2500.0 | 4.53 | 3.48 | 2.74 | 4.87 | 3.72 | 2.92 | | |
| 2600.0 | 1.09 | 1.07 | 1.05 | 1.09 | 1.08 | 1.08 | 1.13 | 1.12 | 1.11 | 1.11 | 1.09 | 1.07 | 2600.0 | 4.62 | 3.51 | 2.76 | 5.02 | 3.81 | 2.96 | | |
| 2700.0 | 1.09 | 1.08 | 1.08 | 1.06 | 1.07 | 1.08 | 1.13 | 1.14 | 1.15 | 1.08 | 1.10 | 1.11 | 2700.0 | 4.67 | 3.56 | 2.76 | 5.06 | 3.77 | 2.95 | | |
| 2800.0 | 1.09 | 1.11 | 1.13 | 1.13 | 1.16 | 1.18 | 1.09 | 1.11 | 1.13 | 1.08 | 1.11 | 1.12 | 2800.0 | 4.63 | 3.52 | 2.73 | 5.02 | 3.79 | 2.93 | | |

Typical Performance Data

| RF FREQ (MHz) | INSERTION LOSS (dB) @ VDD=+2.5V OVER TEMPERATURE | | | | | | ISOLATION (dB) @ VDD=+2.5V OVER TEMPERATURE | | | | | | | | | | | | |
|------------------|--|-------|-------|------------|-------|-------|---|-------|-------|------------------------|-------|-------|---------------------|-------|-------|---------------------|-------|-------|-------|
| | RF COM-RF1 | | | RF COM-RF6 | | | RF COM-RF1 (RF2 ON) | | | RF COM-RF6 (RF5 ON) | | | RF3-RF4 (RF3 ON) | | | RF3-RF5 (RF3 ON) | | | |
| | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | |
| 10.0 | 0.33 | 0.40 | 0.49 | 0.29 | 0.38 | 0.46 | 10.0 | 56.13 | 57.61 | 54.61 | 57.00 | 59.40 | 57.37 | 55.79 | 61.77 | 60.26 | 57.91 | 53.57 | 55.92 |
| 20.0 | 0.34 | 0.42 | 0.50 | 0.33 | 0.42 | 0.50 | 20.0 | 81.02 | 80.10 | 80.84 | 77.45 | 70.81 | 73.76 | 74.42 | 78.23 | 89.40 | 67.65 | 65.23 | 67.56 |
| 30.0 | 0.34 | 0.42 | 0.50 | 0.33 | 0.42 | 0.50 | 30.0 | 81.80 | 82.27 | 82.78 | 70.96 | 72.64 | 73.60 | 78.75 | 78.42 | 90.20 | 63.67 | 63.89 | 63.43 |
| 40.0 | 0.35 | 0.42 | 0.50 | 0.34 | 0.42 | 0.50 | 40.0 | 80.27 | 78.08 | 76.71 | 69.23 | 70.57 | 70.14 | 82.02 | 81.28 | 94.78 | 60.89 | 61.96 | 60.55 |
| 50.0 | 0.35 | 0.42 | 0.50 | 0.34 | 0.42 | 0.50 | 50.0 | 60.16 | 63.00 | 59.86 | 59.32 | 62.72 | 62.79 | 61.48 | 61.07 | 61.47 | 54.73 | 59.62 | 54.32 |
| 60.0 | 0.35 | 0.42 | 0.50 | 0.34 | 0.42 | 0.50 | 60.0 | 67.18 | 74.59 | 65.32 | 66.06 | 62.98 | 63.53 | 66.79 | 68.32 | 68.32 | 56.63 | 57.14 | 55.96 |
| 70.0 | 0.35 | 0.42 | 0.50 | 0.34 | 0.42 | 0.50 | 70.0 | 73.57 | 74.76 | 71.60 | 64.67 | 64.99 | 63.80 | 77.92 | 83.18 | 91.17 | 56.65 | 56.48 | 55.99 |
| 80.0 | 0.35 | 0.42 | 0.50 | 0.35 | 0.43 | 0.50 | 80.0 | 74.20 | 72.32 | 70.60 | 63.20 | 63.92 | 63.28 | 80.47 | 80.20 | 87.40 | 55.63 | 55.36 | 55.02 |
| 90.0 | 0.36 | 0.43 | 0.51 | 0.35 | 0.43 | 0.50 | 90.0 | 72.64 | 70.14 | 70.42 | 62.26 | 62.70 | 62.41 | 78.17 | 84.68 | 94.18 | 54.72 | 54.23 | 54.13 |
| 100.0 | 0.36 | 0.43 | 0.51 | 0.35 | 0.43 | 0.51 | 100.0 | 73.03 | 69.12 | 70.20 | 61.64 | 61.37 | 61.02 | 74.92 | 86.27 | 93.53 | 53.74 | 53.24 | 53.11 |
| 200.0 | 0.35 | 0.43 | 0.51 | 0.35 | 0.43 | 0.51 | 200.0 | 65.17 | 64.53 | 62.73 | 55.14 | 55.15 | 54.93 | 70.59 | 78.32 | 98.54 | 47.47 | 47.18 | 46.97 |
| 300.0 | 0.35 | 0.43 | 0.53 | 0.34 | 0.43 | 0.53 | 300.0 | 61.61 | 60.31 | 59.08 | 51.57 | 51.47 | 51.29 | 66.61 | 72.27 | 77.24 | 43.87 | 43.61 | 43.37 |
| 400.0 | 0.34 | 0.43 | 0.54 | 0.34 | 0.44 | 0.54 | 400.0 | 59.00 | 57.95 | 56.56 | 49.17 | 49.07 | 48.88 | 65.73 | 71.77 | 76.11 | 41.35 | 41.14 | 40.89 |
| 500.0 | 0.33 | 0.43 | 0.54 | 0.33 | 0.44 | 0.55 | 500.0 | 56.80 | 55.98 | 54.53 | 46.87 | 46.92 | 46.78 | 62.91 | 67.83 | 72.46 | 39.26 | 39.07 | 38.86 |
| 600.0 | 0.33 | 0.44 | 0.56 | 0.33 | 0.45 | 0.57 | 600.0 | 55.21 | 54.10 | 53.07 | 45.26 | 45.20 | 45.10 | 62.16 | 66.08 | 70.13 | 37.66 | 37.49 | 37.24 |
| 700.0 | 0.32 | 0.44 | 0.57 | 0.32 | 0.45 | 0.57 | 700.0 | 54.02 | 52.92 | 51.93 | 43.69 | 43.70 | 43.67 | 60.44 | 64.96 | 70.34 | 36.18 | 36.05 | 35.84 |
| 800.0 | 0.31 | 0.43 | 0.56 | 0.32 | 0.45 | 0.57 | 800.0 | 52.68 | 51.83 | 50.62 | 42.47 | 42.44 | 42.41 | 57.81 | 61.68 | 65.98 | 34.88 | 34.78 | 34.65 |
| 900.0 | 0.30 | 0.43 | 0.58 | 0.31 | 0.45 | 0.59 | 900.0 | 51.63 | 50.63 | 49.64 | 41.52 | 41.49 | 41.46 | 56.27 | 59.20 | 62.21 | 33.90 | 33.79 | 33.63 |
| 1000.0 | 0.29 | 0.43 | 0.58 | 0.30 | 0.45 | 0.59 | 1000.0 | 50.66 | 49.80 | 48.65 | 40.23 | 40.29 | 40.30 | 55.64 | 58.38 | 60.55 | 32.90 | 32.80 | 32.67 |
| 1100.0 | 0.28 | 0.42 | 0.57 | 0.29 | 0.44 | 0.59 | 1100.0 | 50.19 | 49.19 | 48.09 | 39.29 | 39.39 | 39.44 | 54.88 | 57.82 | 60.21 | 31.87 | 31.84 | 31.75 |
| 1200.0 | 0.28 | 0.42 | 0.58 | 0.29 | 0.44 | 0.59 | 1200.0 | 49.19 | 48.18 | 47.21 | 38.60 | 38.66 | 38.70 | 52.86 | 55.59 | 58.15 | 31.06 | 31.05 | 30.99 |
| 1300.0 | 0.27 | 0.42 | 0.59 | 0.28 | 0.44 | 0.60 | 1300.0 | 48.45 | 47.68 | 46.57 | 37.73 | 37.85 | 37.94 | 51.34 | 53.39 | 55.20 | 30.45 | 30.44 | 30.37 |
| 1400.0 | 0.25 | 0.41 | 0.58 | 0.26 | 0.43 | 0.59 | 1400.0 | 47.90 | 46.87 | 45.90 | 37.25 | 37.34 | 37.43 | 50.54 | 52.54 | 54.07 | 29.72 | 29.74 | 29.72 |
| 1500.0 | 0.25 | 0.41 | 0.58 | 0.26 | 0.43 | 0.60 | 1500.0 | 46.94 | 46.07 | 45.22 | 36.46 | 36.59 | 36.70 | 49.67 | 51.24 | 52.61 | 29.21 | 29.22 | 29.20 |
| 1600.0 | 0.25 | 0.42 | 0.60 | 0.25 | 0.43 | 0.60 | 1600.0 | 46.83 | 45.93 | 44.80 | 35.92 | 36.08 | 36.18 | 49.41 | 51.03 | 52.06 | 28.56 | 28.59 | 28.57 |
| 1700.0 | 0.23 | 0.40 | 0.59 | 0.24 | 0.42 | 0.60 | 1700.0 | 45.93 | 44.93 | 44.19 | 35.65 | 35.75 | 35.82 | 48.01 | 49.69 | 51.18 | 28.08 | 28.13 | 28.16 |
| 1800.0 | 0.22 | 0.40 | 0.58 | 0.23 | 0.42 | 0.60 | 1800.0 | 45.97 | 44.96 | 43.96 | 35.13 | 35.26 | 35.33 | 46.67 | 48.08 | 49.02 | 27.86 | 27.86 | 27.79 |
| 1900.0 | 0.22 | 0.40 | 0.60 | 0.24 | 0.43 | 0.61 | 1900.0 | 45.22 | 44.23 | 43.30 | 34.87 | 34.93 | 34.99 | 46.53 | 47.84 | 48.77 | 27.27 | 27.30 | 27.27 |
| 2000.0 | 0.21 | 0.40 | 0.59 | 0.23 | 0.42 | 0.60 | 2000.0 | 44.03 | 43.18 | 42.37 | 34.38 | 34.47 | 34.52 | 45.35 | 46.49 | 47.21 | 27.02 | 27.01 | 26.96 |
| 2100.0 | 0.19 | 0.37 | 0.57 | 0.21 | 0.40 | 0.59 | 2100.0 | 44.19 | 43.16 | 42.25 | 33.92 | 33.99 | 34.01 | 45.28 | 46.15 | 46.70 | 26.41 | 26.42 | 26.38 |
| 2200.0 | 0.19 | 0.38 | 0.59 | 0.21 | 0.41 | 0.60 | 2200.0 | 43.15 | 42.15 | 41.22 | 33.83 | 33.85 | 33.83 | 45.00 | 46.28 | 47.32 | 26.04 | 26.06 | 26.02 |
| 2300.0 | 0.18 | 0.37 | 0.58 | 0.20 | 0.40 | 0.59 | 2300.0 | 42.29 | 41.71 | 40.71 | 33.12 | 33.17 | 33.18 | 43.01 | 43.89 | 44.57 | 26.04 | 25.97 | 25.85 |
| 2400.0 | 0.16 | 0.35 | 0.56 | 0.17 | 0.37 | 0.57 | 2400.0 | 42.28 | 41.31 | 40.53 | 32.66 | 32.75 | 32.72 | 43.72 | 44.19 | 44.63 | 25.19 | 25.19 | 25.14 |
| 2500.0 | 0.15 | 0.35 | 0.57 | 0.16 | 0.36 | 0.57 | 2500.0 | 41.67 | 40.93 | 40.10 | 32.35 | 32.38 | 32.40 | 43.30 | 44.19 | 44.88 | 24.97 | 24.95 | 24.91 |
| 2600.0 | 0.14 | 0.34 | 0.57 | 0.15 | 0.36 | 0.57 | 2600.0 | 40.74 | 40.14 | 39.50 | 31.59 | 31.68 | 31.73 | 41.89 | 42.56 | 43.00 | 24.51 | 24.55 | 24.49 |
| 2700.0 | 0.13 | 0.34 | 0.58 | 0.14 | 0.35 | 0.57 | 2700.0 | 40.59 | 39.99 | 39.29 | 31.32 | 31.38 | 31.45 | 42.76 | 43.56 | 43.95 | 23.94 | 23.96 | 23.96 |
| 2800.0 | 0.14 | 0.36 | 0.61 | 0.16 | 0.38 | 0.61 | 2800.0 | 39.88 | 39.34 | 38.69 | 30.89 | 31.02 | 31.12 | 41.71 | 42.79 | 43.51 | 23.91 | 23.92 | 23.91 |



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IF/RF MICROWAVE COMPONENTS



Typical Performance Data

| RF FREQ (MHz) | VSWR (:1) @ VDD=+2.5V OVER TEMPERATURE (ON STATE) | | | | | | | | | | | | RF FREQ (MHz) | VSWR (:1) @ VDD=+2.5V OVER TEMPERATURE (OFF STATE) | | | | | | | | | | | | |
|------------------|--|-------|-------|----------|-------|-------|----------|-------|-------|----------|-------|-------|------------------|---|-------|-------|----------|-------|-------|--------|-------|-------|------|------|------|------|
| | RF COM | | | | | | RF1 | | | RF6 | | | | RF1 | | | | | | RF6 | | | | | | |
| | (RF1 ON) | | | (RF6 ON) | | | (RF1 ON) | | | (RF6 ON) | | | | (RF2 ON) | | | (RF1 ON) | | | RF6 | | | | | | |
| | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | | | | |
| 10.0 | 1.06 | 1.07 | 1.08 | 1.05 | 1.06 | 1.07 | 1.06 | 1.07 | 1.08 | 1.05 | 1.06 | 1.07 | 10.0 | 4.30 | 3.37 | 2.67 | 4.37 | 3.40 | 2.68 | 20.0 | 4.27 | 3.35 | 2.66 | 4.34 | 3.39 | 2.67 |
| 20.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 20.0 | 4.27 | 3.35 | 2.66 | 4.34 | 3.39 | 2.67 | 30.0 | 4.27 | 3.35 | 2.66 | 4.35 | 3.40 | 2.68 |
| 30.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 30.0 | 4.27 | 3.35 | 2.66 | 4.35 | 3.40 | 2.68 | 40.0 | 4.27 | 3.35 | 2.66 | 4.34 | 3.39 | 2.68 |
| 40.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 40.0 | 4.26 | 3.35 | 2.66 | 4.33 | 3.38 | 2.67 | 50.0 | 4.26 | 3.35 | 2.66 | 4.31 | 3.37 | 2.67 |
| 50.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 50.0 | 4.25 | 3.35 | 2.66 | 4.31 | 3.37 | 2.67 | 60.0 | 4.25 | 3.34 | 2.66 | 4.31 | 3.37 | 2.67 |
| 60.0 | 1.05 | 1.07 | 1.09 | 1.06 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 60.0 | 4.25 | 3.34 | 2.66 | 4.31 | 3.37 | 2.67 | 70.0 | 4.25 | 3.34 | 2.66 | 4.31 | 3.37 | 2.67 |
| 70.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 70.0 | 4.25 | 3.34 | 2.66 | 4.31 | 3.37 | 2.67 | 80.0 | 4.25 | 3.34 | 2.66 | 4.32 | 3.38 | 2.67 |
| 80.0 | 1.05 | 1.07 | 1.08 | 1.05 | 1.07 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 80.0 | 4.24 | 3.34 | 2.66 | 4.32 | 3.38 | 2.67 | 90.0 | 4.24 | 3.34 | 2.66 | 4.32 | 3.39 | 2.68 |
| 90.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 90.0 | 4.24 | 3.34 | 2.66 | 4.32 | 3.39 | 2.68 | 100.0 | 4.24 | 3.34 | 2.67 | 4.32 | 3.39 | 2.68 |
| 100.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.04 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 100.0 | 4.22 | 3.33 | 2.66 | 4.28 | 3.35 | 2.66 | 200.0 | 4.22 | 3.33 | 2.66 | 4.28 | 3.35 | 2.66 |
| 200.0 | 1.05 | 1.07 | 1.08 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 300.0 | 4.23 | 3.31 | 2.63 | 4.29 | 3.34 | 2.63 | 400.0 | 4.23 | 3.31 | 2.62 | 4.23 | 3.30 | 2.60 |
| 300.0 | 1.06 | 1.08 | 1.10 | 1.08 | 1.09 | 1.11 | 1.06 | 1.08 | 1.10 | 1.08 | 1.10 | 1.12 | 500.0 | 4.21 | 3.30 | 2.62 | 4.19 | 3.26 | 2.57 | 600.0 | 4.20 | 3.27 | 2.58 | 4.15 | 3.21 | 2.52 |
| 400.0 | 1.08 | 1.10 | 1.12 | 1.10 | 1.11 | 1.13 | 1.05 | 1.07 | 1.09 | 1.09 | 1.11 | 1.12 | 700.0 | 4.21 | 3.26 | 2.55 | 4.09 | 3.16 | 2.47 | 800.0 | 4.19 | 3.25 | 2.56 | 4.07 | 3.15 | 2.47 |
| 500.0 | 1.08 | 1.09 | 1.11 | 1.09 | 1.11 | 1.12 | 1.07 | 1.08 | 1.10 | 1.11 | 1.13 | 1.15 | 900.0 | 4.16 | 3.21 | 2.53 | 4.01 | 3.08 | 2.42 | 1000.0 | 4.18 | 3.22 | 2.50 | 4.00 | 3.06 | 2.39 |
| 1000.0 | 1.10 | 1.12 | 1.14 | 1.11 | 1.11 | 1.13 | 1.05 | 1.06 | 1.07 | 1.13 | 1.14 | 1.15 | 1100.0 | 4.17 | 3.22 | 2.53 | 3.95 | 3.02 | 2.37 | 1200.0 | 4.17 | 3.20 | 2.53 | 3.96 | 3.03 | 2.39 |
| 1200.0 | 1.11 | 1.12 | 1.13 | 1.12 | 1.11 | 1.11 | 1.07 | 1.07 | 1.08 | 1.14 | 1.15 | 1.16 | 1300.0 | 4.16 | 3.20 | 2.50 | 3.91 | 3.01 | 2.38 | 1400.0 | 4.16 | 3.20 | 2.53 | 3.92 | 3.02 | 2.38 |
| 1400.0 | 1.06 | 1.08 | 1.11 | 1.04 | 1.03 | 1.04 | 1.02 | 1.04 | 1.06 | 1.10 | 1.12 | 1.13 | 1500.0 | 4.18 | 3.22 | 2.56 | 3.92 | 3.02 | 2.39 | 1600.0 | 4.18 | 3.22 | 2.54 | 3.93 | 3.02 | 2.38 |
| 1500.0 | 1.09 | 1.10 | 1.11 | 1.07 | 1.06 | 1.06 | 1.02 | 1.03 | 1.04 | 1.10 | 1.12 | 1.13 | 1700.0 | 4.21 | 3.23 | 2.57 | 3.98 | 3.08 | 2.44 | 1800.0 | 4.24 | 3.29 | 2.61 | 4.07 | 3.15 | 2.50 |
| 1600.0 | 1.14 | 1.15 | 1.17 | 1.06 | 1.08 | 1.09 | 1.05 | 1.04 | 1.04 | 1.04 | 1.07 | 1.09 | 1900.0 | 4.28 | 3.29 | 2.62 | 4.18 | 3.22 | 2.57 | 2000.0 | 4.33 | 3.34 | 2.67 | 4.24 | 3.26 | 2.60 |
| 1700.0 | 1.10 | 1.12 | 1.14 | 1.06 | 1.08 | 1.10 | 1.07 | 1.08 | 1.10 | 1.11 | 1.13 | 1.16 | 2100.0 | 4.39 | 3.42 | 2.69 | 4.40 | 3.40 | 2.68 | 2200.0 | 4.43 | 3.40 | 2.70 | 4.47 | 3.50 | 2.76 |
| 1800.0 | 1.08 | 1.10 | 1.10 | 1.04 | 1.05 | 1.06 | 1.04 | 1.05 | 1.06 | 1.09 | 1.12 | 1.14 | 2300.0 | 4.48 | 3.47 | 2.75 | 4.68 | 3.57 | 2.80 | 2400.0 | 4.54 | 3.49 | 2.75 | 4.75 | 3.62 | 2.86 |
| 1900.0 | 1.17 | 1.17 | 1.18 | 1.13 | 1.14 | 1.14 | 1.10 | 1.09 | 1.08 | 1.11 | 1.12 | 1.12 | 2500.0 | 4.53 | 3.47 | 2.74 | 4.86 | 3.73 | 2.92 | 2600.0 | 4.60 | 3.52 | 2.77 | 5.03 | 3.80 | 2.96 |
| 2000.0 | 1.17 | 1.18 | 1.17 | 1.17 | 1.17 | 1.16 | 1.15 | 1.15 | 1.14 | 1.18 | 1.19 | 1.19 | 2700.0 | 4.68 | 3.54 | 2.76 | 5.06 | 3.79 | 2.93 | 2800.0 | 4.63 | 3.54 | 2.72 | 4.99 | 3.79 | 2.94 |
| 2100.0 | 1.09 | 1.10 | 1.09 | 1.11 | 1.11 | 1.10 | 1.10 | 1.10 | 1.09 | 1.15 | 1.16 | 1.16 | 2200.0 | 4.43 | 3.40 | 2.70 | 4.47 | 3.50 | 2.76 | 2300.0 | 4.48 | 3.47 | 2.75 | 4.68 | 3.57 | 2.80 |
| 2200.0 | 1.16 | 1.16 | 1.15 | 1.17 | 1.17 | 1.16 | 1.12 | 1.10 | 1.09 | 1.16 | 1.15 | 1.13 | 2400.0 | 4.54 | 3.49 | 2.75 | 4.75 | 3.62 | 2.86 | 2500.0 | 4.53 | 3.47 | 2.74 | 4.86 | 3.73 | 2.92 |
| 2300.0 | 1.17 | 1.16 | 1.14 | 1.20 | 1.18 | 1.16 | 1.17 | 1.15 | 1.13 | 1.21 | 1.19 | 1.17 | 2600.0 | 4.60 | 3.52 | 2.77 | 5.03 | 3.80 | 2.96 | 2700.0 | 4.68 | 3.54 | 2.76 | 5.06 | 3.79 | 2.93 |
| 2400.0 | 1.07 | 1.05 | 1.03 | 1.08 | 1.07 | 1.05 | 1.12 | 1.12 | 1.11 | 1.13 | 1.13 | 1.12 | 2800.0 | 4.63 | 3.54 | 2.72 | 4.99 | 3.79 | 2.94 | 2500.0 | 4.53 | 3.47 | 2.74 | 4.86 | 3.73 | 2.92 |
| 2500.0 | 1.07 | 1.06 | 1.07 | 1.10 | 1.10 | 1.11 | 1.08 | 1.07 | 1.06 | 1.08 | 1.07 | 1.06 | 2600.0 | 4.60 | 3.52 | 2.77 | 5.03 | 3.80 | 2.96 | 2700.0 | 4.68 | 3.54 | 2.76 | 5.06 | 3.79 | 2.93 |
| 2600.0 | 1.09 | 1.07 | 1.05 | 1.09 | 1.08 | 1.08 | 1.13 | 1.12 | 1.10 | 1.11 | 1.09 | 1.07 | 2800.0 | 4.63 | 3.54 | 2.72 | 4.99 | 3.79 | 2.94 | 2900.0 | 4.68 | 3.54 | 2.76 | 5.06 | 3.79 | 2.93 |
| 2700.0 | 1.09 | 1.08 | 1.08 | 1.06 | 1.07 | 1.08 | 1.13 | 1.15 | 1.16 | 1.08 | 1.10 | 1.11 | 2900.0 | 4.68 | 3.54 | 2.76 | 5.06 | 3.79 | 2.93 | 3000.0 | 4.72 | 3.58 | 2.78 | 5.10 | 3.83 | 2.95 |
| 2800.0 | 1.09 | 1.11 | 1.13 | 1.13 | 1.16 | 1.18 | 1.10 | 1.11 | 1.13 | 1.08 | 1.10 | 1.11 | 3000.0 | 4.72 | 3.58 | 2.78 | 5.10 | 3.83 | 2.95 | 3100.0 | 4.76 | 3.62 | 2.82 | 5.14 | 3.87 | 2.97 |

Typical Performance Data

| RF FREQ (MHz) | INSERTION LOSS (dB) @ VDD=+4.8V OVER TEMPERATURE | | | | | | ISOLATION (dB) @ VDD=+4.8V OVER TEMPERATURE | | | | | | | | | | | | |
|------------------|--|-------|-------|------------|-------|-------|---|-------|-------|------------------------|-------|-------|---------------------|-------|-------|---------------------|-------|-------|-------|
| | RF COM-RF1 | | | RF COM-RF6 | | | RF COM-RF1 (RF2 ON) | | | RF COM-RF6 (RF5 ON) | | | RF3-RF4 (RF3 ON) | | | RF3-RF5 (RF3 ON) | | | |
| | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | |
| 10.0 | 0.33 | 0.41 | 0.49 | 0.30 | 0.38 | 0.46 | 10.0 | 59.38 | 62.30 | 56.45 | 55.50 | 57.26 | 55.91 | 65.22 | 62.79 | 55.60 | 59.24 | 55.22 | 66.30 |
| 20.0 | 0.34 | 0.42 | 0.50 | 0.34 | 0.41 | 0.50 | 20.0 | 76.70 | 74.87 | 79.21 | 79.71 | 71.69 | 77.11 | 79.14 | 77.79 | 77.94 | 66.72 | 65.63 | 67.80 |
| 30.0 | 0.34 | 0.42 | 0.50 | 0.34 | 0.41 | 0.50 | 30.0 | 83.82 | 82.69 | 85.31 | 74.55 | 72.94 | 70.55 | 77.29 | 79.48 | 83.52 | 64.18 | 64.63 | 63.06 |
| 40.0 | 0.35 | 0.42 | 0.50 | 0.34 | 0.42 | 0.50 | 40.0 | 81.43 | 82.00 | 76.66 | 69.03 | 70.31 | 68.20 | 83.53 | 85.59 | 84.58 | 61.76 | 61.55 | 60.43 |
| 50.0 | 0.35 | 0.42 | 0.50 | 0.35 | 0.42 | 0.50 | 50.0 | 59.90 | 62.71 | 62.82 | 58.96 | 62.96 | 57.84 | 61.79 | 62.11 | 61.45 | 61.08 | 68.78 | 55.83 |
| 60.0 | 0.35 | 0.42 | 0.50 | 0.34 | 0.41 | 0.49 | 60.0 | 67.21 | 68.23 | 69.41 | 65.38 | 63.41 | 61.60 | 67.17 | 68.21 | 68.84 | 60.50 | 59.58 | 57.88 |
| 70.0 | 0.35 | 0.42 | 0.50 | 0.35 | 0.42 | 0.50 | 70.0 | 74.25 | 73.78 | 72.46 | 64.83 | 64.58 | 64.04 | 78.23 | 86.02 | 88.72 | 56.88 | 56.68 | 56.03 |
| 80.0 | 0.35 | 0.42 | 0.50 | 0.35 | 0.42 | 0.50 | 80.0 | 73.67 | 72.65 | 72.26 | 63.20 | 63.66 | 62.97 | 79.60 | 84.57 | 99.04 | 55.42 | 55.20 | 54.83 |
| 90.0 | 0.36 | 0.43 | 0.50 | 0.35 | 0.42 | 0.50 | 90.0 | 73.08 | 71.48 | 69.75 | 62.16 | 62.62 | 62.34 | 77.25 | 82.01 | 84.58 | 54.42 | 54.12 | 53.90 |
| 100.0 | 0.36 | 0.43 | 0.51 | 0.35 | 0.42 | 0.50 | 100.0 | 72.77 | 70.08 | 68.22 | 61.63 | 61.38 | 61.47 | 75.64 | 79.59 | 86.78 | 53.65 | 53.22 | 53.17 |
| 200.0 | 0.35 | 0.43 | 0.51 | 0.35 | 0.42 | 0.51 | 200.0 | 65.29 | 64.22 | 63.06 | 55.16 | 55.15 | 54.76 | 70.31 | 75.06 | 88.88 | 47.37 | 47.14 | 46.98 |
| 300.0 | 0.35 | 0.43 | 0.53 | 0.35 | 0.43 | 0.52 | 300.0 | 61.70 | 60.07 | 59.25 | 51.59 | 51.47 | 51.18 | 66.34 | 71.74 | 76.82 | 43.92 | 43.66 | 43.41 |
| 400.0 | 0.34 | 0.44 | 0.54 | 0.34 | 0.43 | 0.54 | 400.0 | 58.84 | 57.92 | 56.70 | 49.10 | 49.01 | 48.82 | 65.85 | 70.67 | 74.93 | 41.32 | 41.12 | 40.84 |
| 500.0 | 0.33 | 0.43 | 0.54 | 0.33 | 0.43 | 0.54 | 500.0 | 56.78 | 55.78 | 54.71 | 46.90 | 46.91 | 46.76 | 62.82 | 67.48 | 72.83 | 39.28 | 39.09 | 38.88 |
| 600.0 | 0.33 | 0.44 | 0.56 | 0.33 | 0.44 | 0.56 | 600.0 | 55.33 | 54.20 | 53.11 | 45.29 | 45.20 | 45.11 | 61.93 | 66.32 | 69.47 | 37.66 | 37.49 | 37.23 |
| 700.0 | 0.32 | 0.44 | 0.57 | 0.33 | 0.45 | 0.57 | 700.0 | 53.98 | 53.01 | 51.93 | 43.67 | 43.69 | 43.62 | 60.36 | 64.98 | 69.94 | 36.17 | 36.03 | 35.85 |
| 800.0 | 0.31 | 0.43 | 0.56 | 0.32 | 0.44 | 0.57 | 800.0 | 52.66 | 51.65 | 50.68 | 42.46 | 42.45 | 42.41 | 58.00 | 62.04 | 66.00 | 34.89 | 34.79 | 34.64 |
| 900.0 | 0.30 | 0.44 | 0.57 | 0.32 | 0.45 | 0.58 | 900.0 | 51.68 | 50.72 | 49.67 | 41.56 | 41.54 | 41.46 | 56.16 | 59.11 | 62.16 | 33.90 | 33.79 | 33.62 |
| 1000.0 | 0.29 | 0.43 | 0.58 | 0.31 | 0.45 | 0.59 | 1000.0 | 50.63 | 49.67 | 48.73 | 40.25 | 40.29 | 40.32 | 55.63 | 58.49 | 60.36 | 32.91 | 32.81 | 32.65 |
| 1100.0 | 0.28 | 0.42 | 0.57 | 0.30 | 0.44 | 0.58 | 1100.0 | 50.21 | 49.09 | 48.16 | 39.32 | 39.40 | 39.43 | 55.02 | 58.05 | 60.06 | 31.86 | 31.84 | 31.75 |
| 1200.0 | 0.28 | 0.43 | 0.58 | 0.29 | 0.44 | 0.59 | 1200.0 | 49.23 | 48.21 | 47.22 | 38.60 | 38.67 | 38.71 | 52.83 | 55.69 | 58.15 | 31.06 | 31.05 | 30.99 |
| 1300.0 | 0.27 | 0.43 | 0.59 | 0.28 | 0.44 | 0.59 | 1300.0 | 48.48 | 47.58 | 46.50 | 37.73 | 37.85 | 37.95 | 51.34 | 53.42 | 55.27 | 30.44 | 30.43 | 30.37 |
| 1400.0 | 0.25 | 0.41 | 0.58 | 0.27 | 0.43 | 0.59 | 1400.0 | 47.91 | 46.91 | 45.90 | 37.26 | 37.36 | 37.44 | 50.64 | 52.68 | 54.05 | 29.71 | 29.74 | 29.71 |
| 1500.0 | 0.25 | 0.41 | 0.58 | 0.26 | 0.43 | 0.59 | 1500.0 | 46.91 | 46.09 | 45.21 | 36.45 | 36.60 | 36.72 | 49.57 | 51.40 | 52.60 | 29.20 | 29.22 | 29.19 |
| 1600.0 | 0.25 | 0.42 | 0.60 | 0.25 | 0.43 | 0.60 | 1600.0 | 46.83 | 45.89 | 44.80 | 35.92 | 36.09 | 36.18 | 49.40 | 51.08 | 52.08 | 28.56 | 28.60 | 28.56 |
| 1700.0 | 0.23 | 0.41 | 0.59 | 0.25 | 0.42 | 0.60 | 1700.0 | 45.95 | 45.11 | 44.21 | 35.63 | 35.73 | 35.82 | 47.98 | 49.71 | 51.06 | 28.09 | 28.14 | 28.16 |
| 1800.0 | 0.22 | 0.40 | 0.58 | 0.24 | 0.41 | 0.59 | 1800.0 | 45.98 | 44.99 | 43.98 | 35.13 | 35.26 | 35.34 | 46.66 | 47.99 | 49.09 | 27.85 | 27.86 | 27.79 |
| 1900.0 | 0.23 | 0.41 | 0.60 | 0.24 | 0.42 | 0.61 | 1900.0 | 45.27 | 44.17 | 43.29 | 34.86 | 34.94 | 34.97 | 46.51 | 47.74 | 48.82 | 27.28 | 27.30 | 27.27 |
| 2000.0 | 0.21 | 0.40 | 0.59 | 0.23 | 0.42 | 0.60 | 2000.0 | 43.97 | 43.30 | 42.39 | 34.39 | 34.46 | 34.52 | 45.32 | 46.39 | 47.22 | 27.02 | 27.02 | 26.96 |
| 2100.0 | 0.19 | 0.38 | 0.57 | 0.21 | 0.40 | 0.59 | 2100.0 | 44.18 | 43.17 | 42.28 | 33.93 | 33.99 | 34.04 | 45.29 | 46.16 | 46.72 | 26.41 | 26.43 | 26.38 |
| 2200.0 | 0.19 | 0.38 | 0.58 | 0.22 | 0.40 | 0.60 | 2200.0 | 43.17 | 42.27 | 41.26 | 33.84 | 33.85 | 33.83 | 44.99 | 46.32 | 47.33 | 26.05 | 26.08 | 26.02 |
| 2300.0 | 0.18 | 0.38 | 0.58 | 0.21 | 0.39 | 0.59 | 2300.0 | 42.30 | 41.52 | 40.72 | 33.11 | 33.17 | 33.19 | 43.09 | 43.91 | 44.63 | 26.03 | 25.99 | 25.85 |
| 2400.0 | 0.16 | 0.35 | 0.56 | 0.17 | 0.37 | 0.57 | 2400.0 | 42.33 | 41.46 | 40.57 | 32.68 | 32.71 | 32.73 | 43.62 | 44.33 | 44.67 | 25.20 | 25.20 | 25.14 |
| 2500.0 | 0.15 | 0.36 | 0.57 | 0.16 | 0.36 | 0.57 | 2500.0 | 41.62 | 40.82 | 40.11 | 32.34 | 32.39 | 32.40 | 43.31 | 44.28 | 44.84 | 24.97 | 24.95 | 24.90 |
| 2600.0 | 0.14 | 0.35 | 0.57 | 0.15 | 0.36 | 0.57 | 2600.0 | 40.77 | 40.16 | 39.55 | 31.58 | 31.66 | 31.73 | 41.94 | 42.64 | 43.04 | 24.50 | 24.53 | 24.48 |
| 2700.0 | 0.13 | 0.35 | 0.58 | 0.14 | 0.35 | 0.57 | 2700.0 | 40.55 | 39.85 | 39.33 | 31.33 | 31.41 | 31.45 | 42.73 | 43.46 | 43.92 | 23.93 | 23.97 | 23.95 |
| 2800.0 | 0.14 | 0.36 | 0.61 | 0.16 | 0.38 | 0.61 | 2800.0 | 39.85 | 39.22 | 38.67 | 30.89 | 31.04 | 31.13 | 41.73 | 42.72 | 43.52 | 23.91 | 23.93 | 23.91 |



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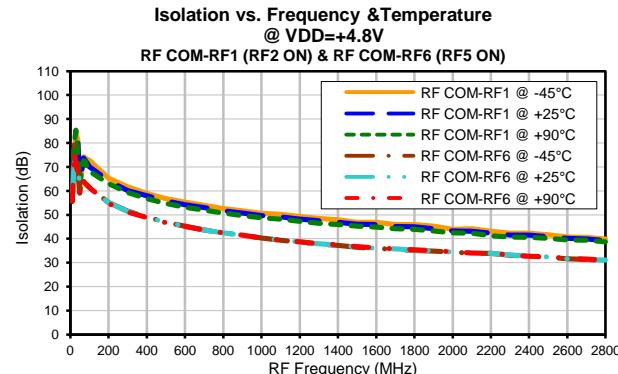
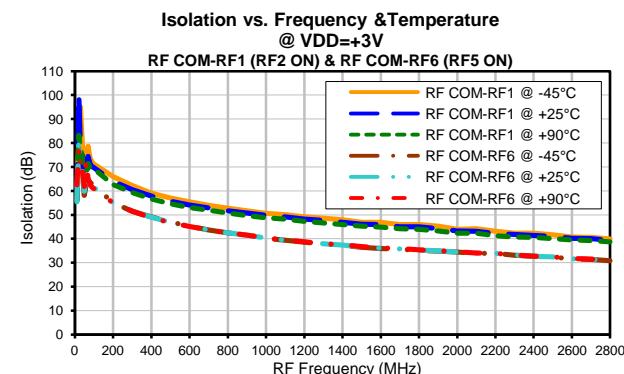
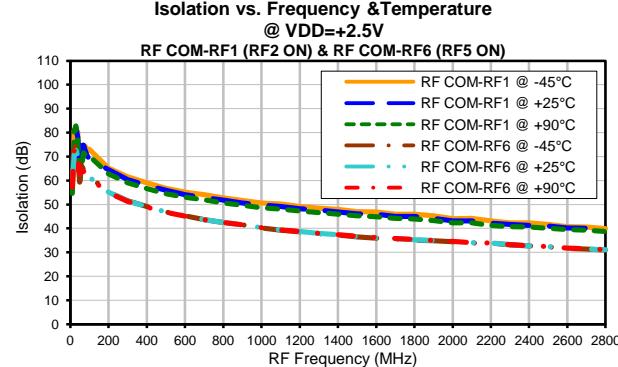
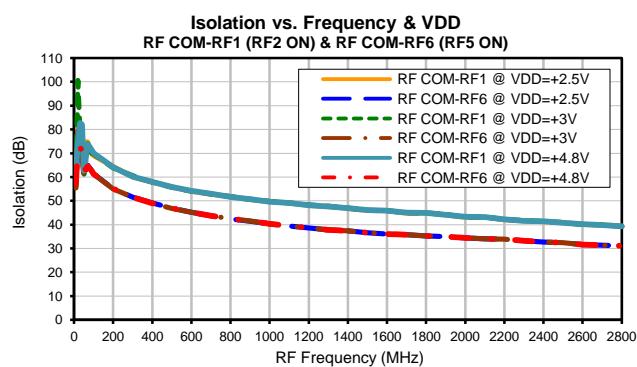
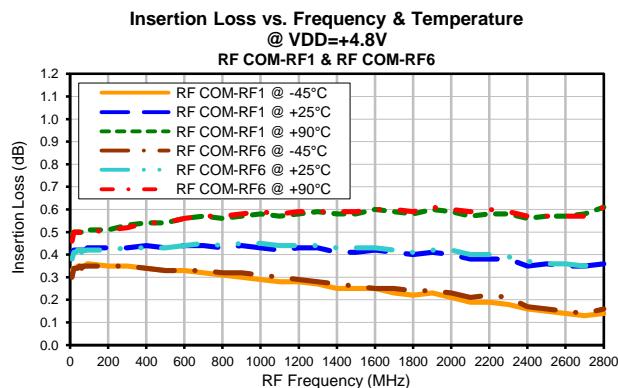
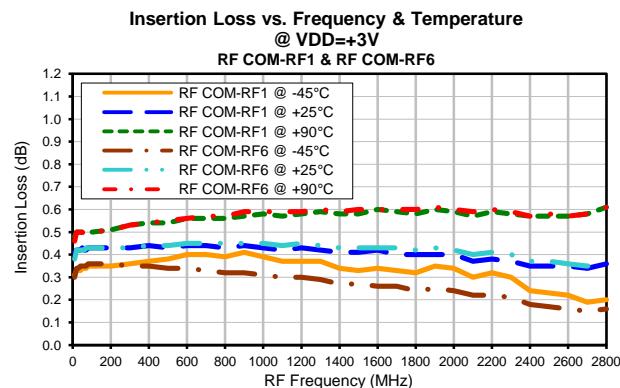
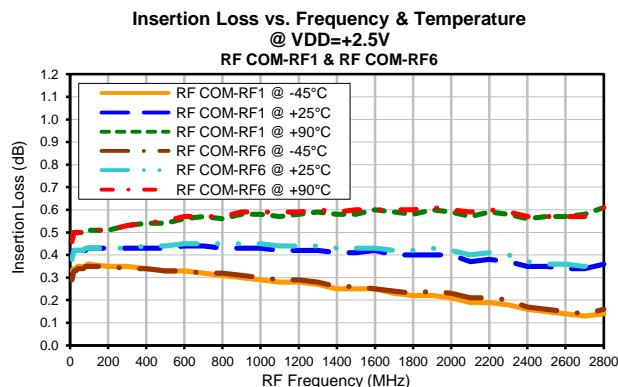
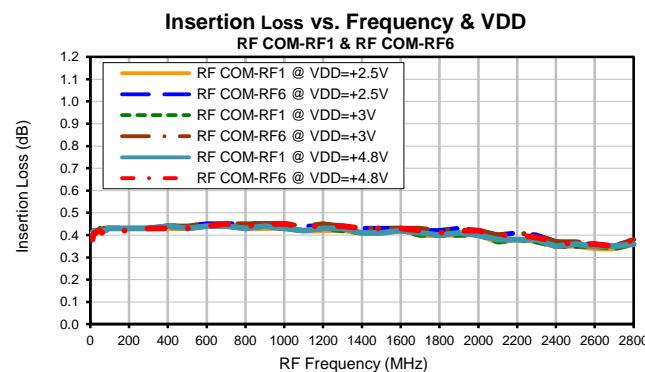
Typical Performance Data

| RF FREQ (MHz) | VSWR (:1) @ VDD=+4.8 OVER TEMPERATURE (ON STATE) | | | | | | | | | | | | RF FREQ (MHz) | VSWR (:1) @ VDD=+4.8V OVER TEMPERATURE (OFF STATE) | | | | | | | | | | | | |
|------------------|---|-------|-------|----------|-------|-------|----------|-------|-------|----------|-------|-------|------------------|---|-------|-------|----------|-------|-------|--------|-------|-------|------|------|------|------|
| | RF COM | | | | | | RF1 | | | RF6 | | | | RF1 | | | | | | RF6 | | | | | | |
| | (RF1 ON) | | | (RF6 ON) | | | (RF1 ON) | | | (RF6 ON) | | | | (RF2 ON) | | | (RF1 ON) | | | RF6 | | | | | | |
| | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | -45°C | +25°C | +90°C | | | | |
| 10.0 | 1.06 | 1.07 | 1.08 | 1.05 | 1.06 | 1.08 | 1.06 | 1.07 | 1.08 | 1.05 | 1.06 | 1.07 | 10.0 | 4.31 | 3.36 | 2.67 | 4.38 | 3.38 | 2.69 | 20.0 | 4.27 | 3.34 | 2.66 | 4.35 | 3.37 | 2.68 |
| 20.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 20.0 | 4.27 | 3.34 | 2.66 | 4.35 | 3.37 | 2.68 | 30.0 | 4.27 | 3.34 | 2.66 | 4.35 | 3.38 | 2.68 |
| 30.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 30.0 | 4.27 | 3.34 | 2.66 | 4.35 | 3.38 | 2.68 | 40.0 | 4.27 | 3.34 | 2.66 | 4.35 | 3.38 | 2.68 |
| 40.0 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 40.0 | 4.26 | 3.34 | 2.66 | 4.33 | 3.36 | 2.68 | 50.0 | 4.26 | 3.34 | 2.66 | 4.32 | 3.35 | 2.67 |
| 50.0 | 1.05 | 1.07 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 50.0 | 4.26 | 3.34 | 2.66 | 4.32 | 3.35 | 2.67 | 60.0 | 4.26 | 3.34 | 2.66 | 4.32 | 3.35 | 2.67 |
| 60.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 60.0 | 4.25 | 3.33 | 2.66 | 4.32 | 3.35 | 2.68 | 70.0 | 4.25 | 3.33 | 2.66 | 4.32 | 3.35 | 2.68 |
| 70.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 70.0 | 4.25 | 3.33 | 2.66 | 4.32 | 3.35 | 2.68 | 80.0 | 4.25 | 3.33 | 2.66 | 4.32 | 3.36 | 2.68 |
| 80.0 | 1.05 | 1.07 | 1.08 | 1.05 | 1.07 | 1.08 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 80.0 | 4.25 | 3.33 | 2.66 | 4.33 | 3.37 | 2.68 | 90.0 | 4.25 | 3.33 | 2.66 | 4.33 | 3.37 | 2.68 |
| 90.0 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 90.0 | 4.24 | 3.33 | 2.67 | 4.33 | 3.37 | 2.69 | 100.0 | 4.24 | 3.33 | 2.67 | 4.33 | 3.37 | 2.69 |
| 100.0 | 1.05 | 1.07 | 1.09 | 1.06 | 1.07 | 1.09 | 1.04 | 1.06 | 1.08 | 1.05 | 1.06 | 1.08 | 100.0 | 4.22 | 3.31 | 2.66 | 4.29 | 3.33 | 2.67 | 200.0 | 4.22 | 3.31 | 2.66 | 4.29 | 3.33 | 2.67 |
| 200.0 | 1.05 | 1.07 | 1.08 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 1.05 | 1.07 | 1.09 | 300.0 | 4.23 | 3.30 | 2.63 | 4.29 | 3.32 | 2.64 | 400.0 | 4.24 | 3.30 | 2.62 | 4.25 | 3.28 | 2.61 |
| 300.0 | 1.06 | 1.08 | 1.10 | 1.08 | 1.09 | 1.11 | 1.06 | 1.08 | 1.10 | 1.09 | 1.10 | 1.12 | 500.0 | 4.22 | 3.29 | 2.62 | 4.20 | 3.24 | 2.57 | 600.0 | 4.20 | 3.26 | 2.58 | 4.15 | 3.20 | 2.53 |
| 400.0 | 1.08 | 1.10 | 1.12 | 1.10 | 1.11 | 1.13 | 1.05 | 1.07 | 1.09 | 1.09 | 1.11 | 1.12 | 700.0 | 4.21 | 3.25 | 2.55 | 4.10 | 3.14 | 2.48 | 800.0 | 4.19 | 3.23 | 2.56 | 4.08 | 3.13 | 2.47 |
| 500.0 | 1.08 | 1.10 | 1.11 | 1.09 | 1.11 | 1.12 | 1.07 | 1.08 | 1.10 | 1.11 | 1.13 | 1.15 | 900.0 | 4.16 | 3.21 | 2.53 | 4.01 | 3.06 | 2.43 | 1000.0 | 4.19 | 3.20 | 2.51 | 4.01 | 3.05 | 2.39 |
| 1000.0 | 1.10 | 1.12 | 1.14 | 1.11 | 1.11 | 1.13 | 1.05 | 1.06 | 1.07 | 1.13 | 1.14 | 1.15 | 1000.0 | 4.19 | 3.20 | 2.51 | 4.01 | 3.05 | 2.39 | 1100.0 | 4.18 | 3.20 | 2.53 | 3.95 | 3.01 | 2.37 |
| 1100.0 | 1.08 | 1.09 | 1.10 | 1.09 | 1.08 | 1.07 | 1.06 | 1.06 | 1.07 | 1.14 | 1.15 | 1.16 | 1100.0 | 4.18 | 3.20 | 2.53 | 3.95 | 3.01 | 2.37 | 1200.0 | 4.17 | 3.20 | 2.53 | 3.96 | 3.02 | 2.39 |
| 1200.0 | 1.11 | 1.12 | 1.13 | 1.12 | 1.12 | 1.11 | 1.07 | 1.07 | 1.08 | 1.14 | 1.15 | 1.16 | 1200.0 | 4.17 | 3.18 | 2.51 | 3.94 | 3.00 | 2.38 | 1300.0 | 4.17 | 3.18 | 2.51 | 3.94 | 3.00 | 2.38 |
| 1300.0 | 1.12 | 1.13 | 1.15 | 1.09 | 1.09 | 1.11 | 1.04 | 1.03 | 1.03 | 1.09 | 1.10 | 1.10 | 1300.0 | 4.16 | 3.19 | 2.53 | 3.91 | 3.00 | 2.39 | 1400.0 | 4.16 | 3.19 | 2.53 | 3.91 | 3.00 | 2.39 |
| 1400.0 | 1.06 | 1.08 | 1.11 | 1.04 | 1.03 | 1.04 | 1.02 | 1.04 | 1.06 | 1.10 | 1.12 | 1.13 | 1400.0 | 4.18 | 3.21 | 2.56 | 3.94 | 3.00 | 2.39 | 1500.0 | 4.18 | 3.21 | 2.56 | 3.94 | 3.00 | 2.39 |
| 1500.0 | 1.09 | 1.10 | 1.11 | 1.07 | 1.06 | 1.06 | 1.03 | 1.03 | 1.04 | 1.10 | 1.12 | 1.13 | 1500.0 | 4.20 | 3.20 | 2.54 | 3.92 | 3.00 | 2.39 | 1600.0 | 4.20 | 3.20 | 2.54 | 3.92 | 3.00 | 2.39 |
| 1600.0 | 1.14 | 1.15 | 1.17 | 1.06 | 1.08 | 1.09 | 1.05 | 1.03 | 1.04 | 1.05 | 1.07 | 1.09 | 1600.0 | 4.21 | 3.23 | 2.57 | 3.99 | 3.07 | 2.43 | 1700.0 | 4.21 | 3.23 | 2.57 | 3.99 | 3.07 | 2.43 |
| 1700.0 | 1.10 | 1.13 | 1.14 | 1.06 | 1.08 | 1.10 | 1.07 | 1.09 | 1.10 | 1.11 | 1.14 | 1.16 | 1700.0 | 4.24 | 3.27 | 2.61 | 4.08 | 3.13 | 2.50 | 1800.0 | 4.24 | 3.27 | 2.61 | 4.08 | 3.13 | 2.50 |
| 1800.0 | 1.08 | 1.10 | 1.10 | 1.04 | 1.05 | 1.06 | 1.04 | 1.05 | 1.06 | 1.09 | 1.12 | 1.14 | 1800.0 | 4.28 | 3.29 | 2.62 | 4.17 | 3.20 | 2.57 | 1900.0 | 4.28 | 3.29 | 2.62 | 4.17 | 3.20 | 2.57 |
| 1900.0 | 1.17 | 1.17 | 1.18 | 1.13 | 1.14 | 1.14 | 1.10 | 1.09 | 1.08 | 1.11 | 1.12 | 1.12 | 1900.0 | 4.28 | 3.33 | 2.66 | 4.27 | 3.25 | 2.60 | 2000.0 | 4.34 | 3.33 | 2.66 | 4.27 | 3.25 | 2.60 |
| 2000.0 | 1.17 | 1.18 | 1.17 | 1.17 | 1.17 | 1.16 | 1.15 | 1.15 | 1.14 | 1.19 | 1.19 | 1.19 | 2000.0 | 4.40 | 3.39 | 2.70 | 4.39 | 3.37 | 2.68 | 2100.0 | 4.40 | 3.39 | 2.70 | 4.39 | 3.37 | 2.68 |
| 2100.0 | 1.09 | 1.09 | 1.09 | 1.10 | 1.11 | 1.10 | 1.10 | 1.10 | 1.09 | 1.14 | 1.16 | 1.16 | 2100.0 | 4.42 | 3.41 | 2.69 | 4.51 | 3.48 | 2.75 | 2200.0 | 4.42 | 3.41 | 2.69 | 4.51 | 3.48 | 2.75 |
| 2200.0 | 1.16 | 1.16 | 1.15 | 1.18 | 1.17 | 1.16 | 1.12 | 1.11 | 1.08 | 1.16 | 1.15 | 1.13 | 2200.0 | 4.50 | 3.43 | 2.75 | 4.67 | 3.56 | 2.82 | 2300.0 | 4.50 | 3.43 | 2.75 | 4.67 | 3.56 | 2.82 |
| 2300.0 | 1.17 | 1.16 | 1.14 | 1.20 | 1.18 | 1.16 | 1.17 | 1.16 | 1.14 | 1.21 | 1.19 | 1.16 | 2300.0 | 4.54 | 3.48 | 2.75 | 4.77 | 3.60 | 2.86 | 2400.0 | 4.54 | 3.48 | 2.75 | 4.77 | 3.60 | 2.86 |
| 2400.0 | 1.07 | 1.05 | 1.03 | 1.08 | 1.07 | 1.05 | 1.12 | 1.11 | 1.11 | 1.13 | 1.13 | 1.12 | 2400.0 | 4.53 | 3.45 | 2.74 | 4.87 | 3.70 | 2.92 | 2500.0 | 4.53 | 3.45 | 2.74 | 4.87 | 3.70 | 2.92 |
| 2500.0 | 1.07 | 1.06 | 1.07 | 1.10 | 1.10 | 1.11 | 1.08 | 1.07 | 1.06 | 1.09 | 1.07 | 1.06 | 2500.0 | 4.61 | 3.49 | 2.77 | 5.04 | 3.78 | 2.95 | 2600.0 | 4.61 | 3.49 | 2.77 | 5.04 | 3.78 | 2.95 |
| 2600.0 | 1.09 | 1.07 | 1.05 | 1.09 | 1.08 | 1.08 | 1.13 | 1.12 | 1.10 | 1.10 | 1.09 | 1.07 | 2600.0 | 4.67 | 3.54 | 2.76 | 5.06 | 3.76 | 2.94 | 2700.0 | 4.67 | 3.54 | 2.76 | 5.06 | 3.76 | 2.94 |
| 2700.0 | 1.09 | 1.08 | 1.08 | 1.06 | 1.07 | 1.08 | 1.13 | 1.14 | 1.15 | 1.08 | 1.10 | 1.11 | 2700.0 | 4.63 | 3.50 | 2.72 | 5.00 | 3.77 | 2.95 | 2800.0 | 4.63 | 3.50 | 2.72 | 5.00 | 3.77 | 2.95 |
| 2800.0 | 1.09 | 1.11 | 1.13 | 1.13 | 1.16 | 1.18 | 1.09 | 1.12 | 1.13 | 1.09 | 1.10 | 1.11 | 2800.0 | 4.63 | 3.50 | 2.72 | 5.00 | 3.77 | 2.95 | | | | | | | |

RF Switch SP6T

JSW6-33DR+

Typical Performance Curves



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 minicircuits.com

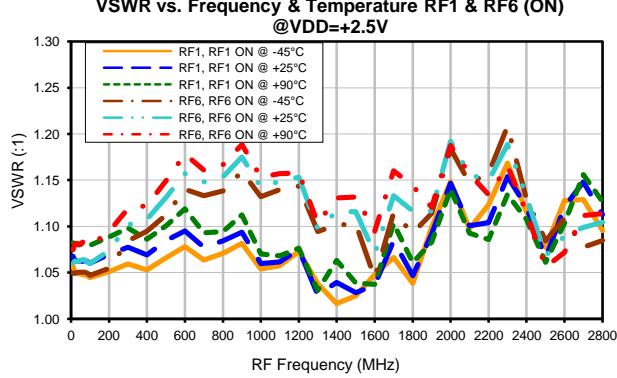
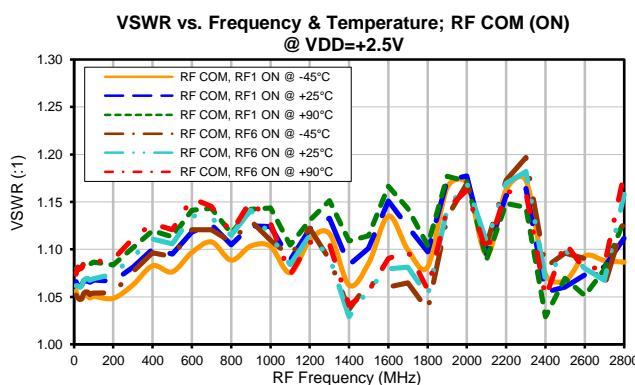
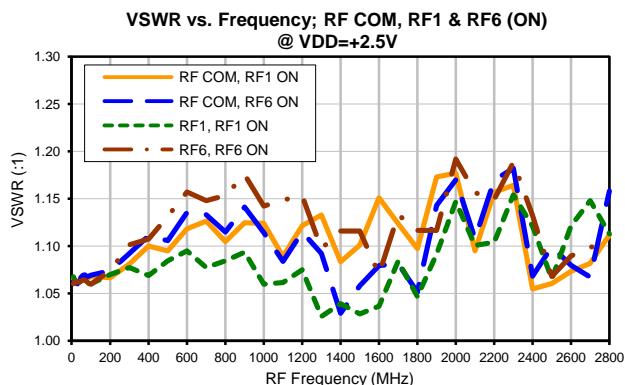
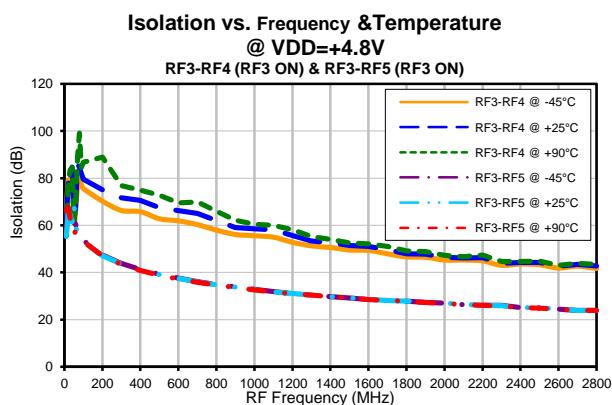
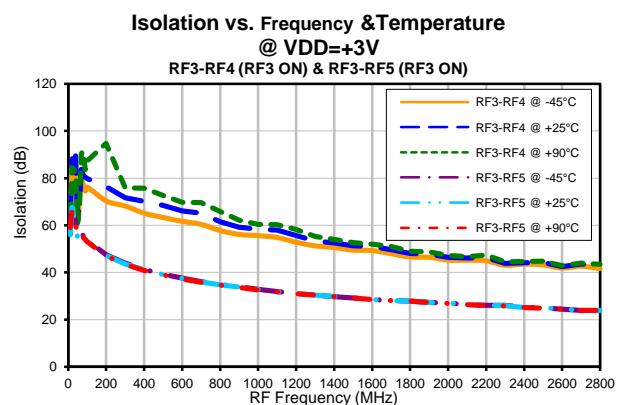
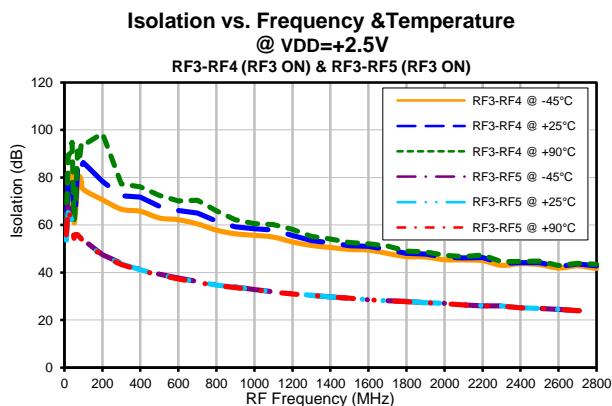
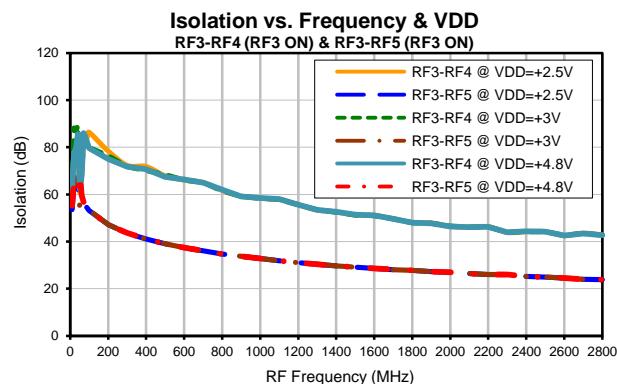
IF/RF MICROWAVE COMPONENTS



REV. OR
JSW6-33DR+
3/18/2014

Page 1 of 4

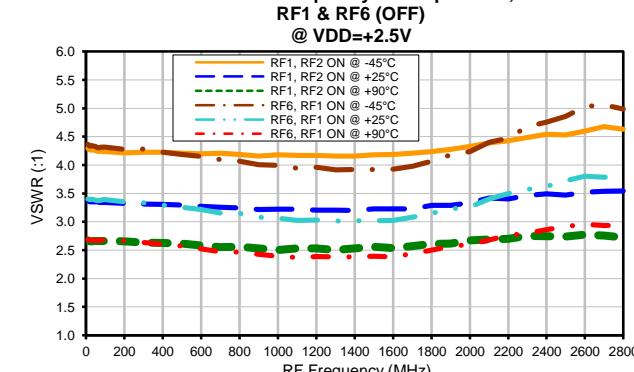
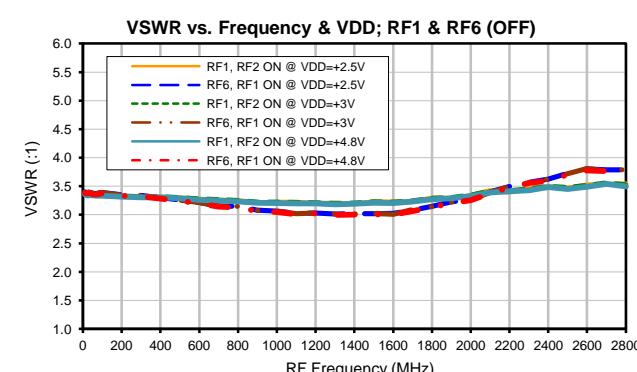
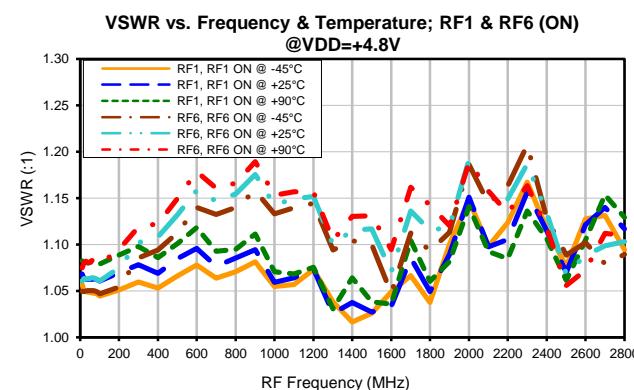
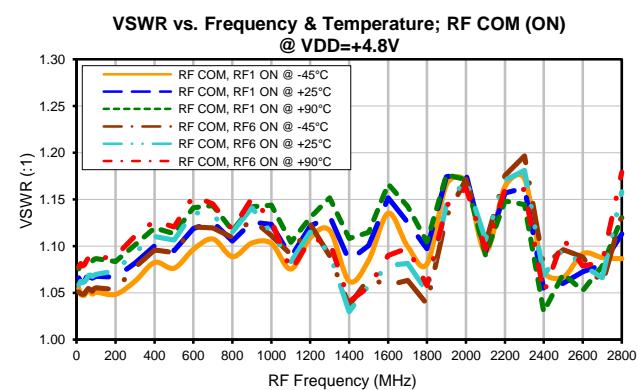
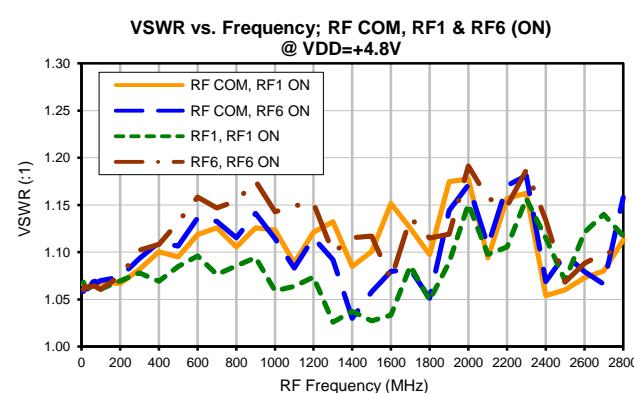
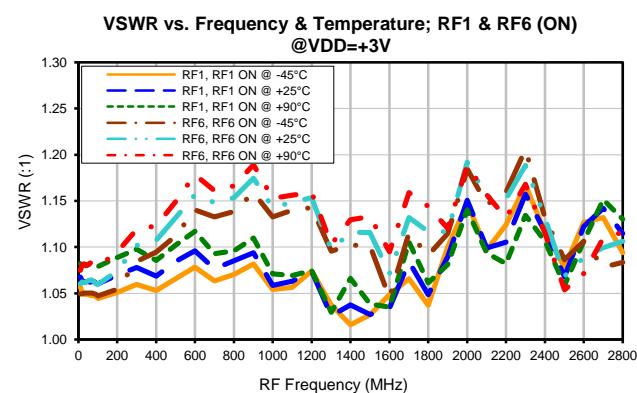
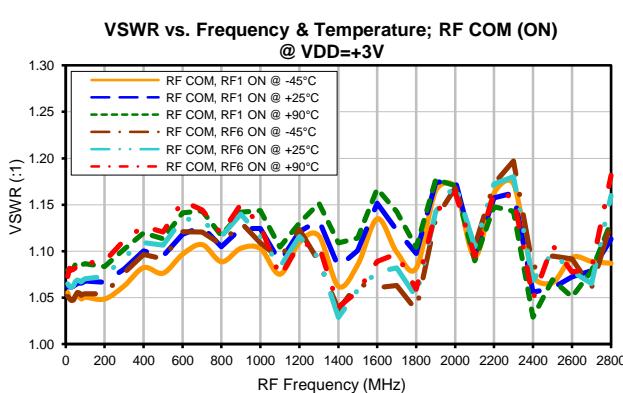
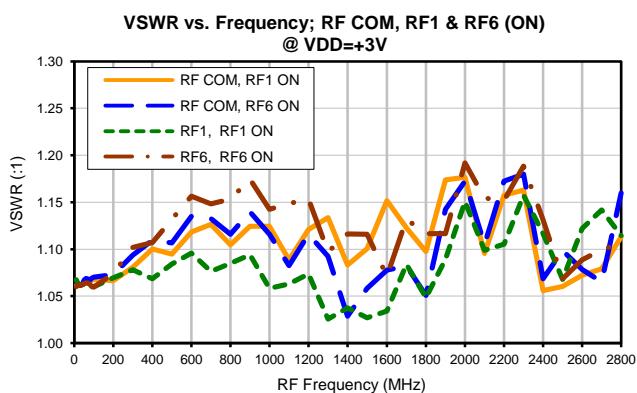
Typical Performance Curves



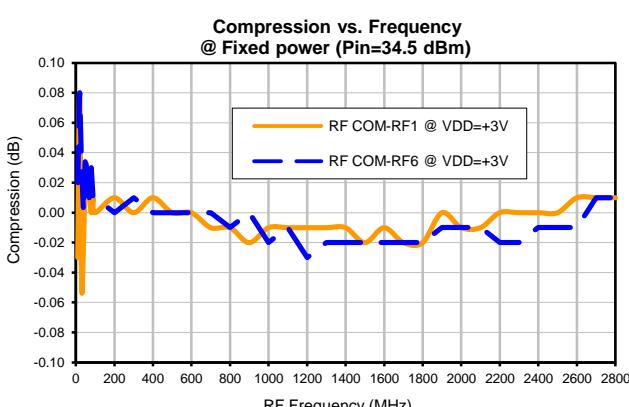
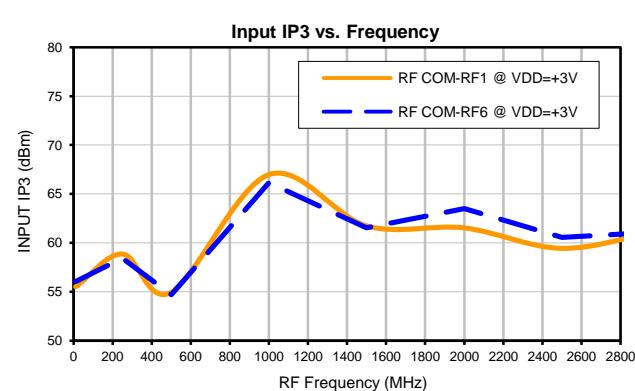
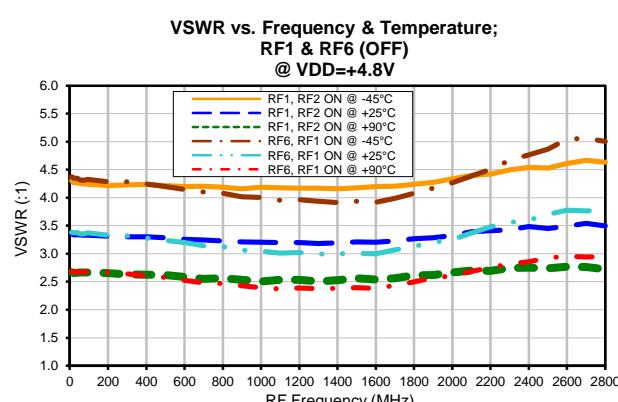
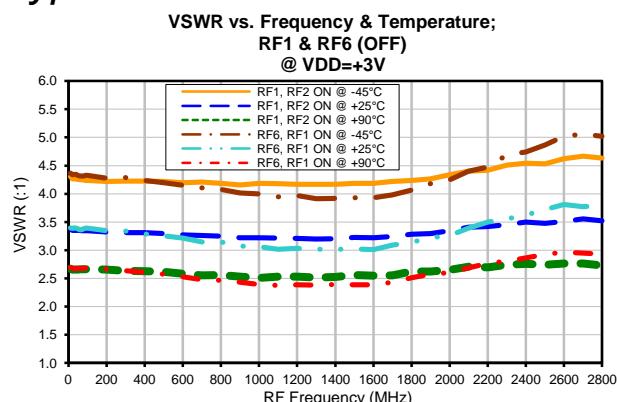
RF Switch SP6T

JSW6-33DR+

Typical Performance Curves



Typical Performance Curves

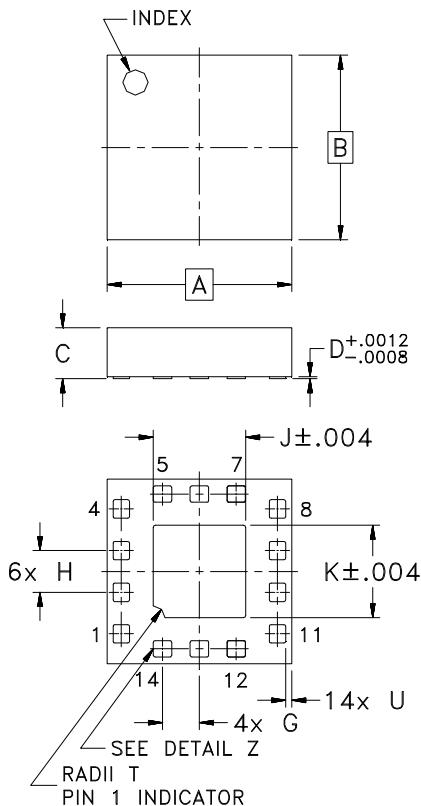


Case Style

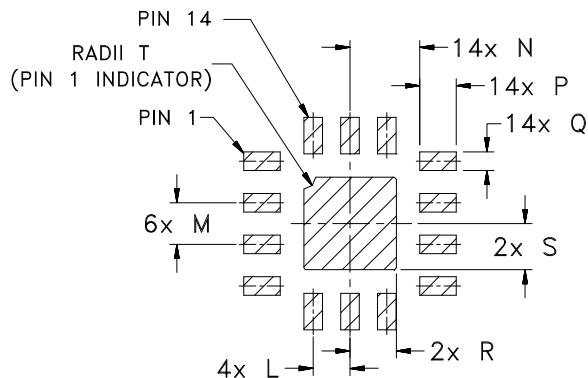
MT

MT1817

Outline Dimensions



PCB Land Pattern



Suggested Layout,
Tolerance to be within $\pm .002$

| CASE# | A | B | C | D | E | F | G | H | J | K | L | M | N |
|--------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| MT1817 | .079 (2.00) | .079 (2.00) | .022 (0.55) | .0008 (0.02) | .007 (0.18) | .008 (0.20) | .016 (0.40) | .018 (0.45) | .039 (1.00) | .039 (1.00) | .016 (0.40) | .018 (0.45) | .030 (0.75) |

| CASE# | P | Q | R | S | T | U | WT, GRAM |
|--------|----------------|----------------|----------------|----------------|----------------|-----------------|----------|
| MT1817 | .016 (0.40) | .008 (0.20) | .020 (0.50) | .020 (0.50) | .005 (0.13) | .003 (0.065) | .008 |

Dimensions are in inches (mm). Tolerances: 3 Pl. $\pm .002$

Notes:

1. Case material: Plastic.
2. Termination finish: Matte Tin.



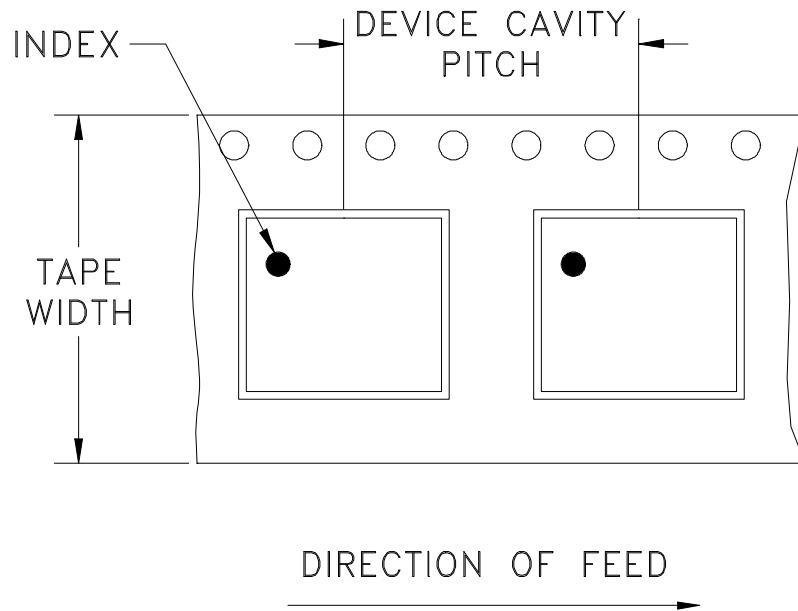
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Tape & Reel Packaging TR-F108

DEVICE ORIENTATION IN T&R



| Tape Width, mm | Device Cavity Pitch, mm | Reel Size, inches | Devices per Reel | |
|----------------|-------------------------|-------------------|--------------------------|------|
| 12 | 4 | 7 | Small quantity standards | 20 |
| | | | | 50 |
| | | | | 100 |
| | | | | 200 |
| | | | | 500 |
| | | | | 1000 |
| | | | | 2000 |
| | | 7 | Standard | 3000 |

Note: Please Consult individual data sheet to determine device per reel availability

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

Go to: www.minicircuits.com/pages/pdfs/tape.pdf



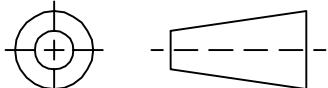
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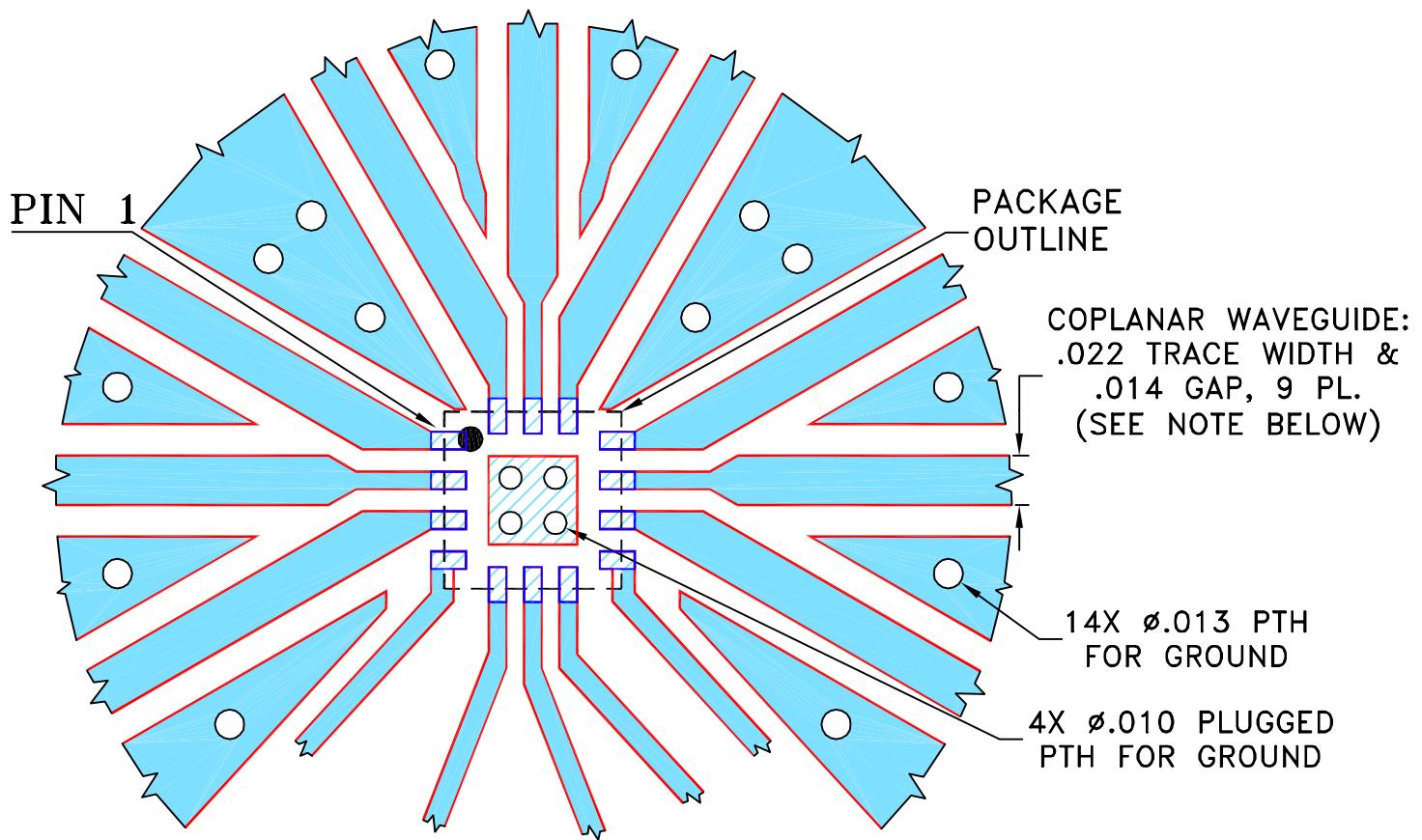
THIRD ANGLE PROJECTION



REVISIONS

| REV | ECN No. | DESCRIPTION | DATE | DR | AUTH |
|-----|---------|-------------|----------|----|------|
| OR | M145644 | NEW RELEASE | 03/14/14 | AV | RS |
| | | | | | |
| | | | | | |
| | | | | | |

SUGGESTED MOUNTING CONFIGURATION
FOR MT1817 CASE STYLE, "14SW02" PIN CODE

NOTES:

1. TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS $.010" \pm .001"$. COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH AND GAP MAY NEED TO BE MODIFIED.
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER).

DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK.

UNLESS OTHERWISE SPECIFIED

INITIALS

DATE

DIMENSIONS ARE IN INCHES

DRAWN AV 03/13/14

TOLERANCES ON:

CHECKED IL 03/13/142 PL DECIMALS \pm APPROVED RS 03/14/143 PL DECIMALS $\pm .005$ ANGLES \pm FRACTIONS \pm 

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Brooklyn NY 11235

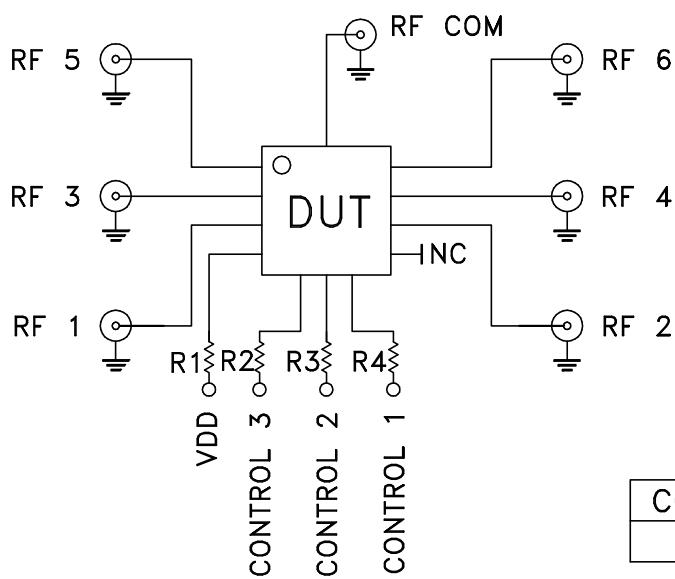
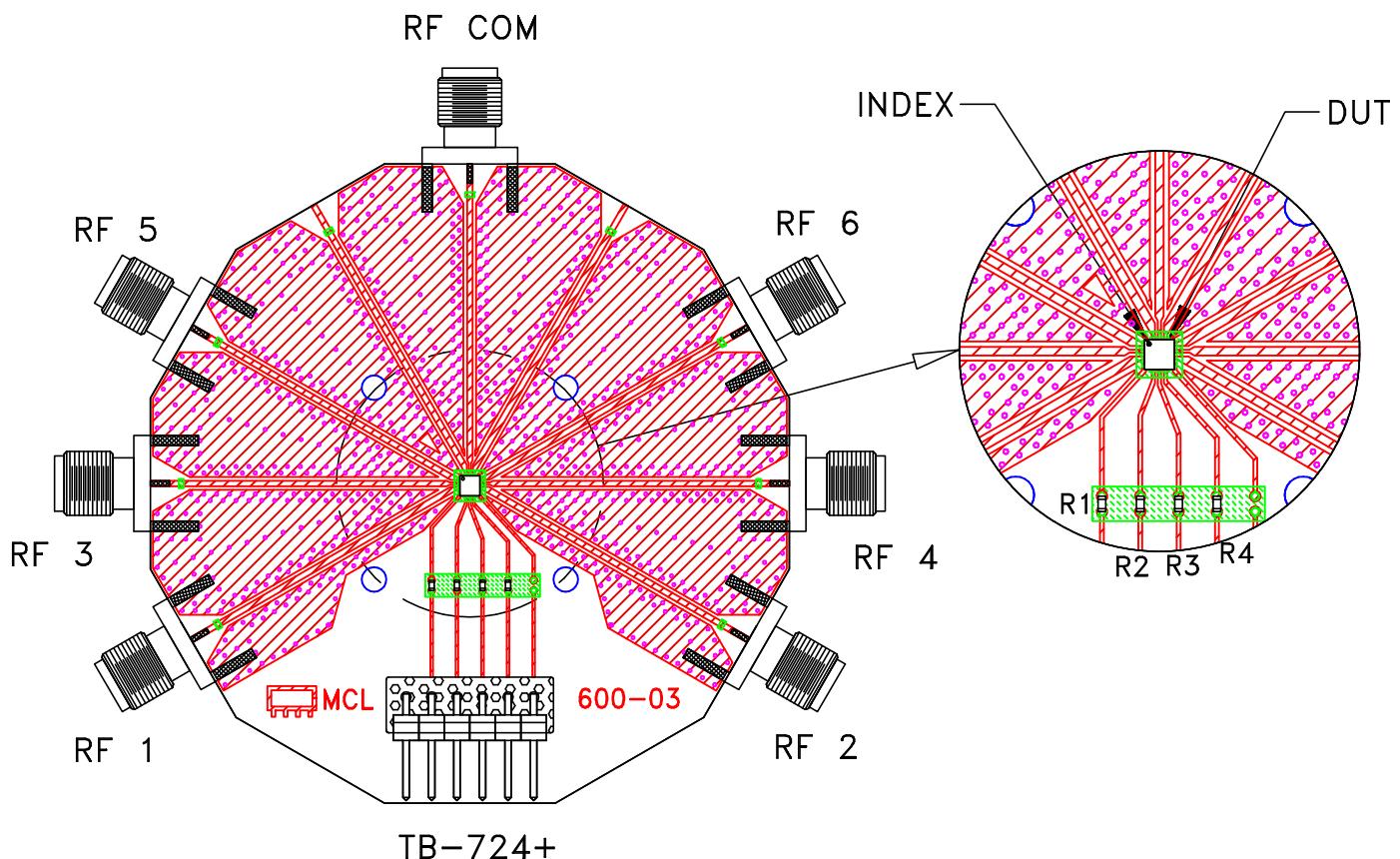
PL, 14SW02, MT1817, TB-724+

| SIZE | CODE IDENT | DRAWING NO: | REV: |
|---------------|-------------|---------------|------|
| A | 15542 | 98-PL-416 | OR |
| FILE: 98PL416 | SCALE: 12:1 | SHEET: 1 OF 1 | |

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ASHEET1.DWG REV:A DATE:01/12/95

Evaluation Board and Circuit



| COMPONENT | VALUE | SIZE |
|-----------|--------|------|
| R1-R4 | 1 kOhm | 0402 |

Schematic Diagram

Notes:

1. 50 Ohm SMA Female connectors.
2. PCB Material: RO4350 or equivalent,
Dielectric Constant=3.5,
Thickness=.010 inch.

Mini-Circuits®

**Environmental Specifications****ENV75**

All Mini-Circuits products are manufactured under exacting quality assurance and control standards, and are capable of meeting published specifications after being subjected to any or all of the following physical and environmental test.

| Specification | Test/Inspection Condition | Reference/Spec |
|-------------------------------|--|-----------------------------|
| Operating Temperature | -40° to 85° C Ambient Environment | Individual Model Data Sheet |
| Storage Temperature | -65° to 150° C / -40° to 125° C / -55° to 150° C Ambient Environment | Individual Model Data Sheet |
| Temperature Cycling | -65° to 150°C, 500 cycles | JESD22-A104, condition C |
| HAST | 130°C, 85% RH, 33 PSIA, 96 hours, nominal bias | JESD22-A110 |
| High Temp Storage | 150°C 1000 hours | JESD22-A103 |
| Solderability | Per Reference Spec | JESD22-B102 |
| Moisture Sensitivity: Level 1 | Bake at 125°C for 24 hours Soak at 85°C/85% RH for 168 hours, Reflow 3 cycles at 260°C peak | J-STD-020 D.01 |