SUBJECT:  RD00HVS1 RF characteristics data at f=450-470MHz, Vdd=7.2V

SUMMARY:
This application note shows the RF characteristics (Frequency Characteristics and Pin vs. Pout characteristics) data with RD00HVS1 using Broad-Band Fixture and a schematic for test fixture.

- Sample history:
  RD00HVS1: Lot number “552”

- Evaluate conditions:
  @f=450MHz : Vdd=7.2V, Pin=5mW, Idq=0.05A (Vgg adj.)
  @f=460MHz : Vdd=7.2V, Pin=5mW, Idq=0.05A (Vgg adj.)
  @f=470MHz : Vdd=7.2V, Pin=5mW, Idq=0.05A (Vgg adj.)

- Results:
  Page 2 shows the RF characteristics (Frequency characteristics) data.
  Page 3-5 shows the RF characteristics (Pin vs. Pout characteristics) data.
  Page 6 shows the Equivalent Circuit and schematic for test fixture.
RD00HVS1 RF characteristics data at f=450-470MHz, Vdd=7.2V
- AN-UHF-075-A-

RD00HVS1 Frequency Characteristics (@ f=450 - 470MHz)

**RD00HVS1 Frequency Characteristics**

**Vdd=7.2V, Idq=50mA**

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<th>Vgg (V)</th>
<th>Vdd (V)</th>
<th>Pin (dBm)</th>
<th>Pout (dBm)</th>
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Note: part of hatching show out of target

Vdd=7.2V, Vgg=2.65V, Idq=50mA

Application Note for Silicon RF Power Semiconductors

2/6
RD00HVS1 RF characteristics data at f=450-470MHz, Vdd=7.2V

- AN-UHF-075-A-

RD00HVS1 Pin vs. Pout characteristics (@f=450MHz)

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<th>Idd (A)</th>
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<th>Gain (dB)</th>
<th>R.L. (V)</th>
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PoPin = 7.20 (V)
Igg = 2.650 (V)
f = 450 (MHz)

Application Note for Silicon RF Power Semiconductors

3/6
RD00HVS1 RF characteristics data at f=450-470MHz, Vdd=7.2V

RD00HVS1 Pin vs. Pout characteristics (@ f=460MHz)

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<th>Vgg (V)</th>
<th>Idd (A)</th>
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<th>R.L. (W)</th>
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Vdd= 7.20 (V)  Vgg= 2.650 (V)
Iddq= 50 (mA)  f= 460 (MHz)

Application Note for Silicon RF Power Semiconductors

4/6
RD00HVS1 Pin vs. Pout characteristics (@ f=470MHz)

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<th>Po (dBm)</th>
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<th>Vgg (V)</th>
<th>Idd (mA)</th>
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<th>R.L. (dB)</th>
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Vdd= 7.20 (V)  Vgg= 2.650 (V)
Idq= 50 (mA)  f= 470 (MHz)
RD00HVS1 RF characteristics data at f=450-470MHz, Vdd=7.2V

Application Note for Silicon RF Power Semiconductors

6/6