

APPLICATION NOTE

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(Taking charge of Silicon RF by
MIYOSHI Electronics)

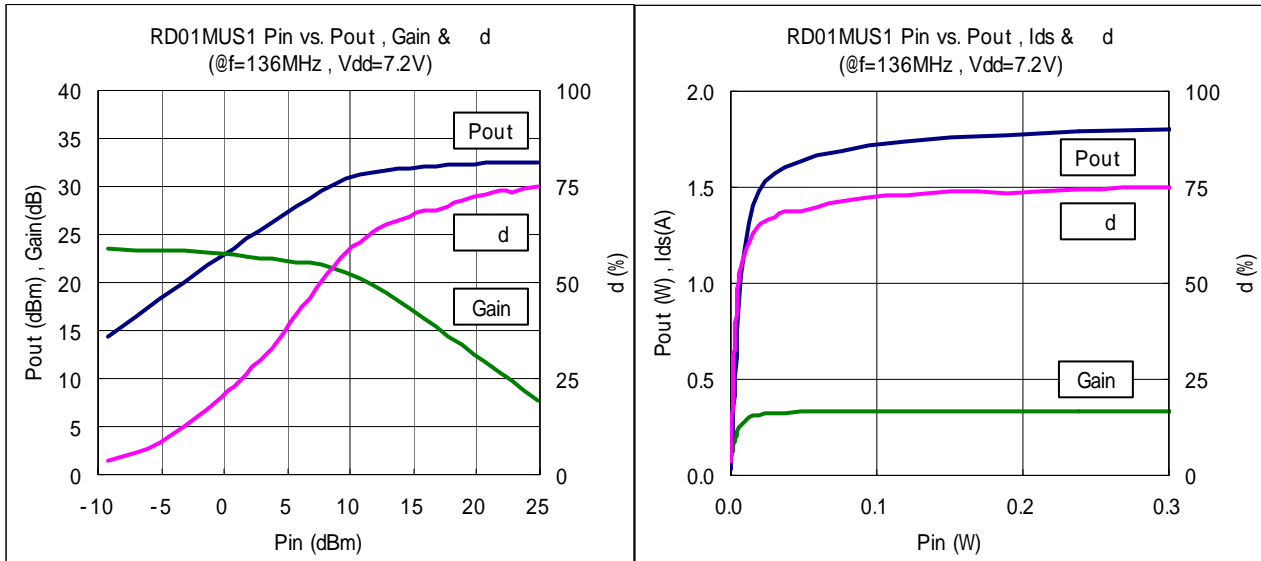
SUBJECT: RD01MUS1 RF characteristics data

SUMMARY:

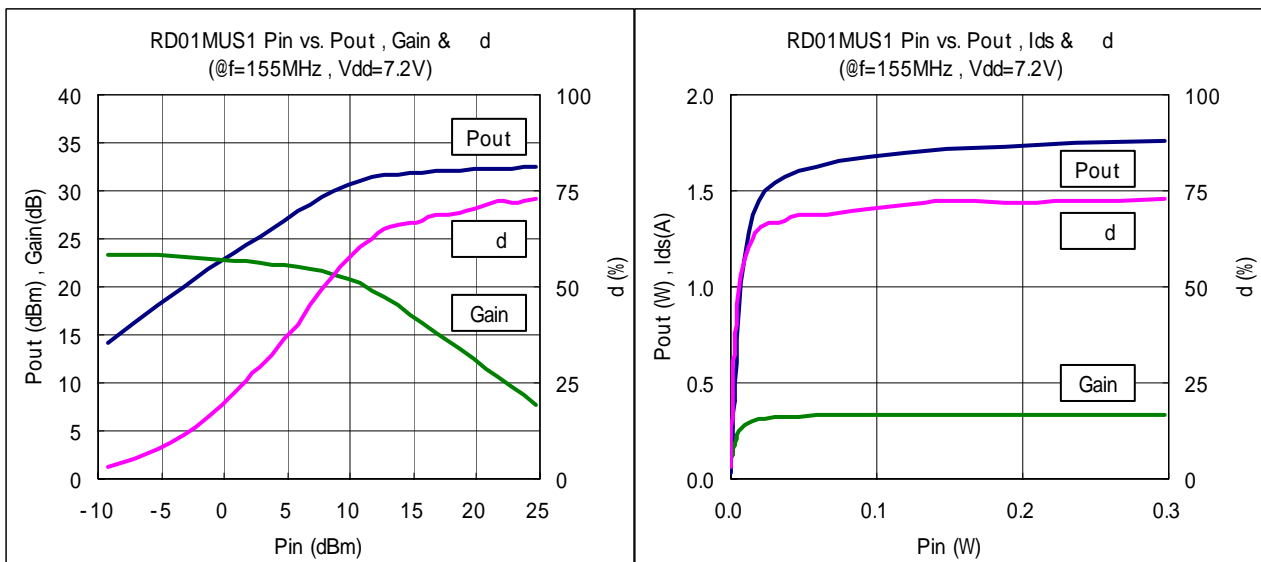
This application note show the RF characteristics (Pin vs. Pout characteristics) data with RD01MUS1.

- Sample history :
 - RD01MUS1: Lot number "022XA"
- Evaluate conditions :
 - @f=136MHz : Vdd=7.2V, Idq=0.1A (Vgg adj., tuned the matching circuit to f=136MHz)
 - @f=155MHz : Vdd=7.2V, Idq=0.1A (Vgg adj. tuned the matching circuit to f=155MHz)
 - @f=175MHz : Vdd=7.2V, Idq=0.1A (Vgg adj. tuned the matching circuit to f=175MHz)
 - @f=520MHz : Vdd=7.2V, Idq=0.1A (Vgg adj. tuned the matching circuit to f=520MHz)
- Results :
 - Page 2-3 shows the RF characteristics (Pin vs. Pout characteristics) data.
 - Page 4-7 shows the Equivalent Circuit.

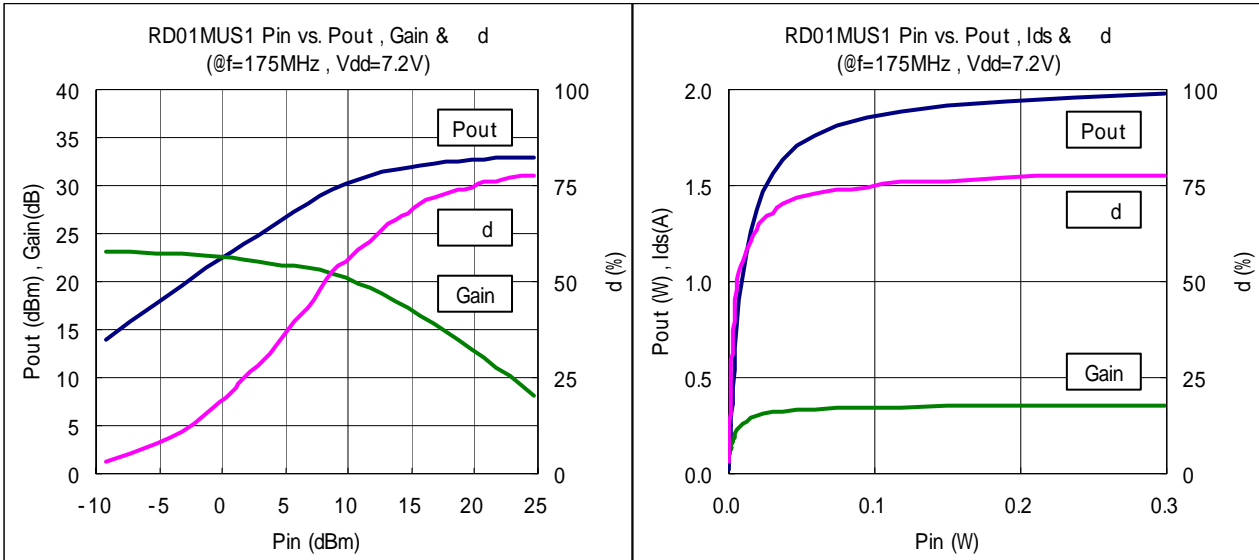
RD01MUS1 Pin vs. Pout characteristics (@ f=136MHz)



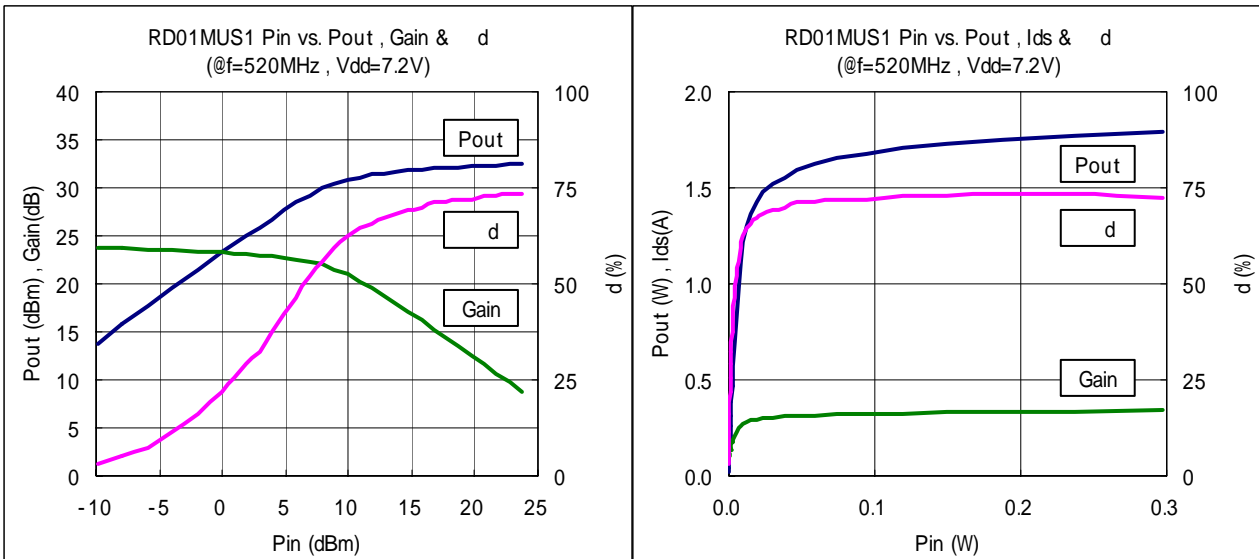
RD01MUS1 Pin vs. Pout characteristics (@ f=155MHz)



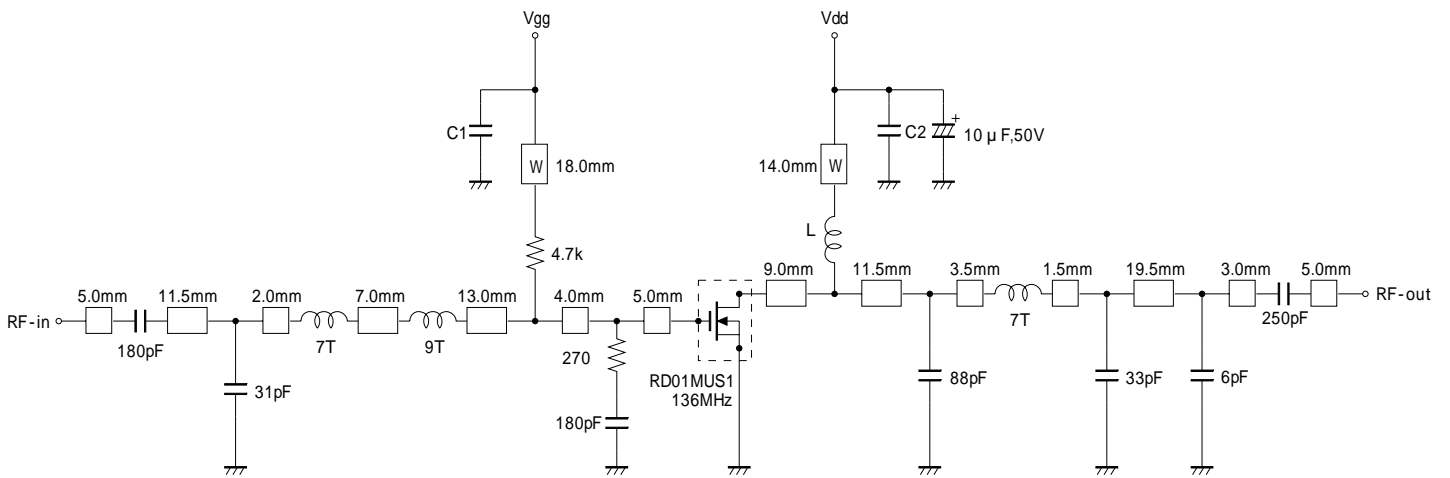
RD01MUS1 Pin vs. Pout characteristics (@ f=175MHz)



RD01MUS1 Pin vs. Pout characteristics (@ f=520MHz)

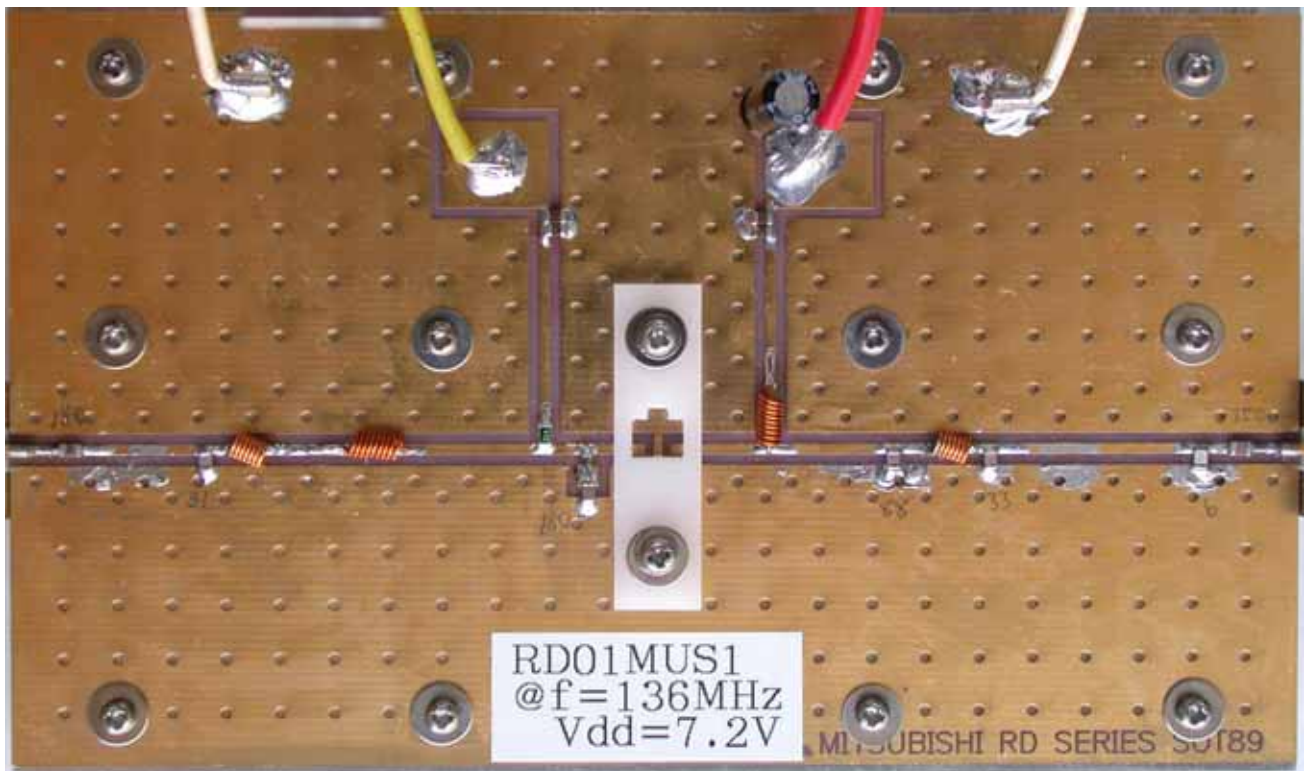


RD01MUS1 Equivalent Circuit (@f=136MHz)

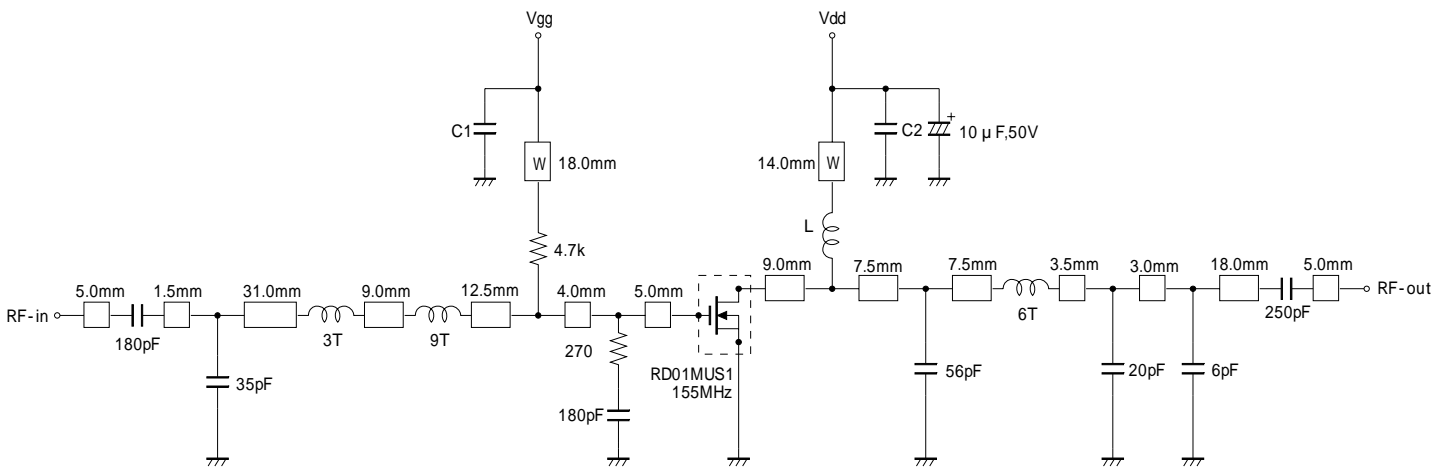


L:9Turns,D:0.43mm, 2.46(the outside diameter)
 Enameled wire(mm)
 C1,C2:1000pF,0.022 µ F in parallel

Note:Board material-glass epoxy substrate
 micro strip line width=1.0mm/50 , r:4.8,t=0.6mm
 W: line width=1.0mm

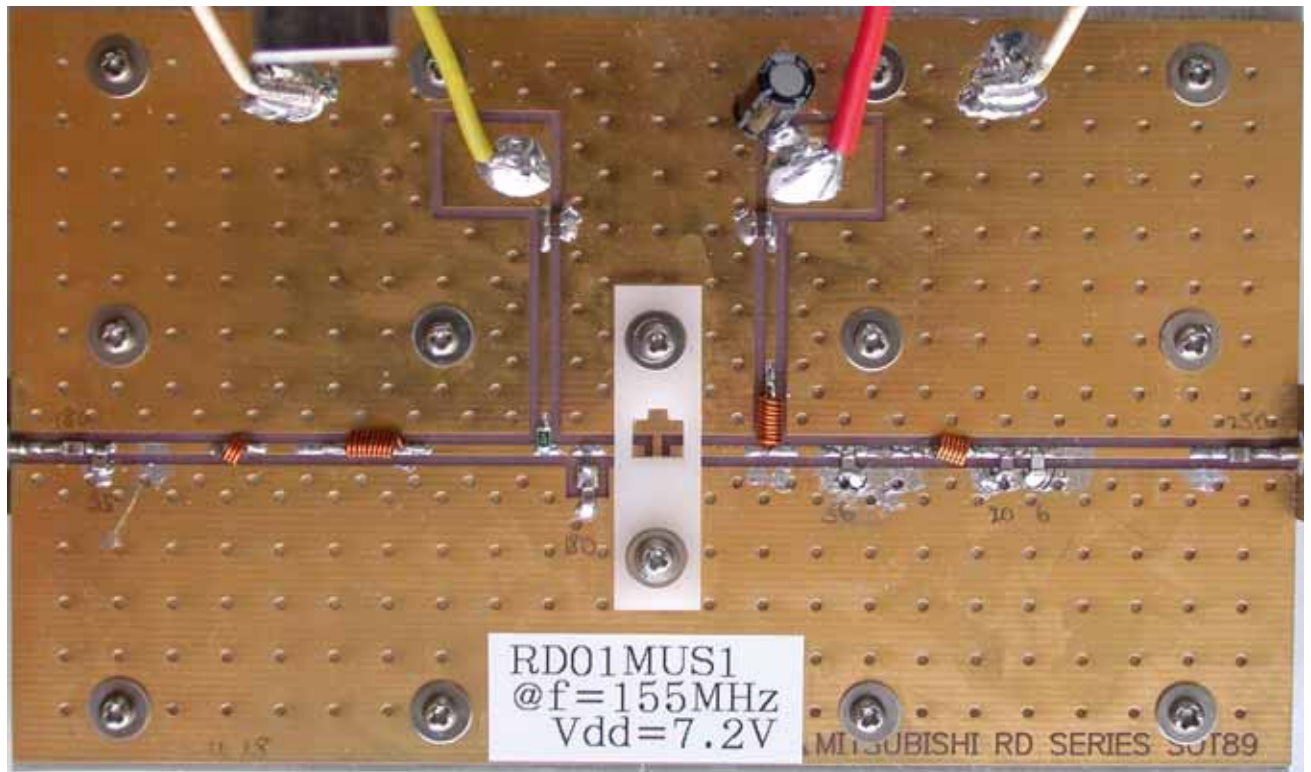


RD01MUS1 Equivalent Circuit (@f=155MHz)

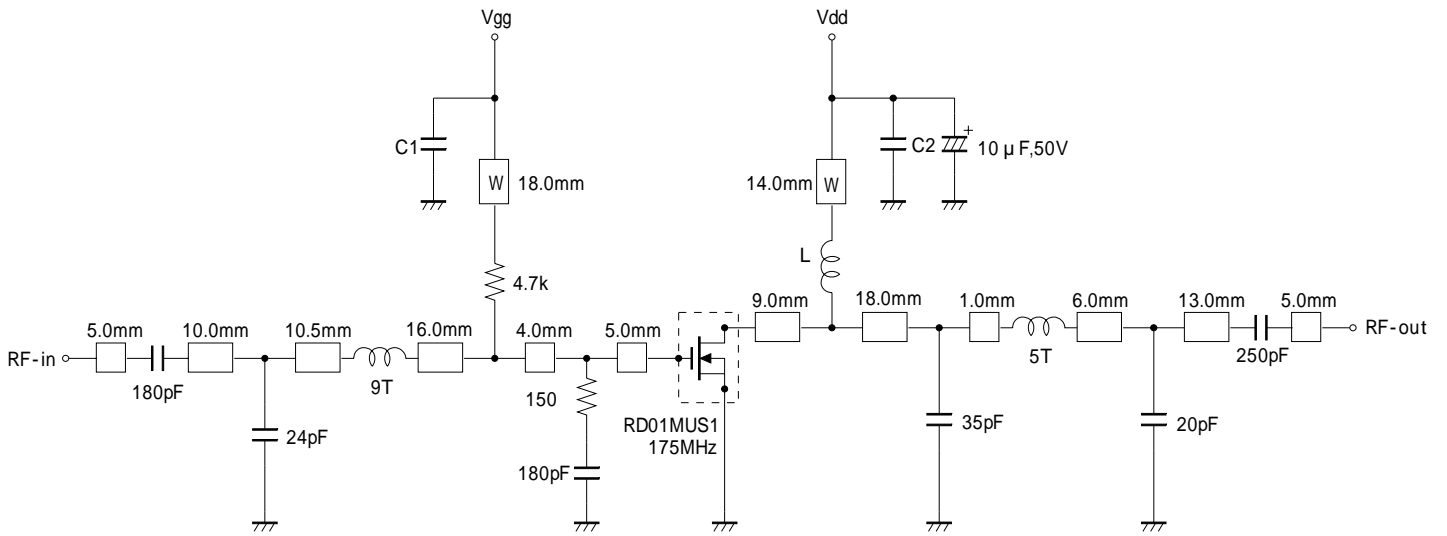


L:9Turns,D:0.43mm, 2.46(the outside diameter)
 Enamelled wire(mm)
 C1,C2:1000pF,0.022µF in parallel

Note:Board material-glass epoxy substrate
 micro strip line width=1.0mm/50, r:4.8,t=0.6mm
 W: line width=1.0mm

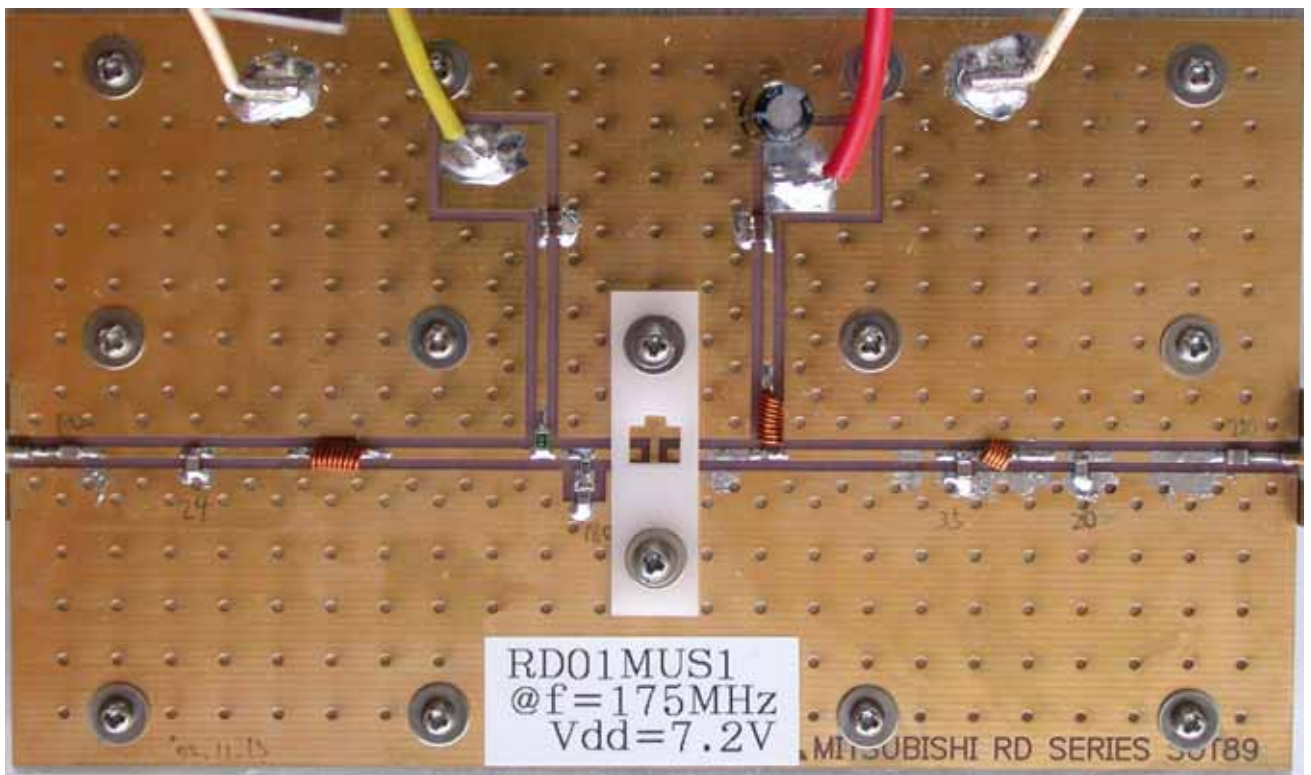


RD01MUS1 Equivalent Circuit (@f=175MHz)

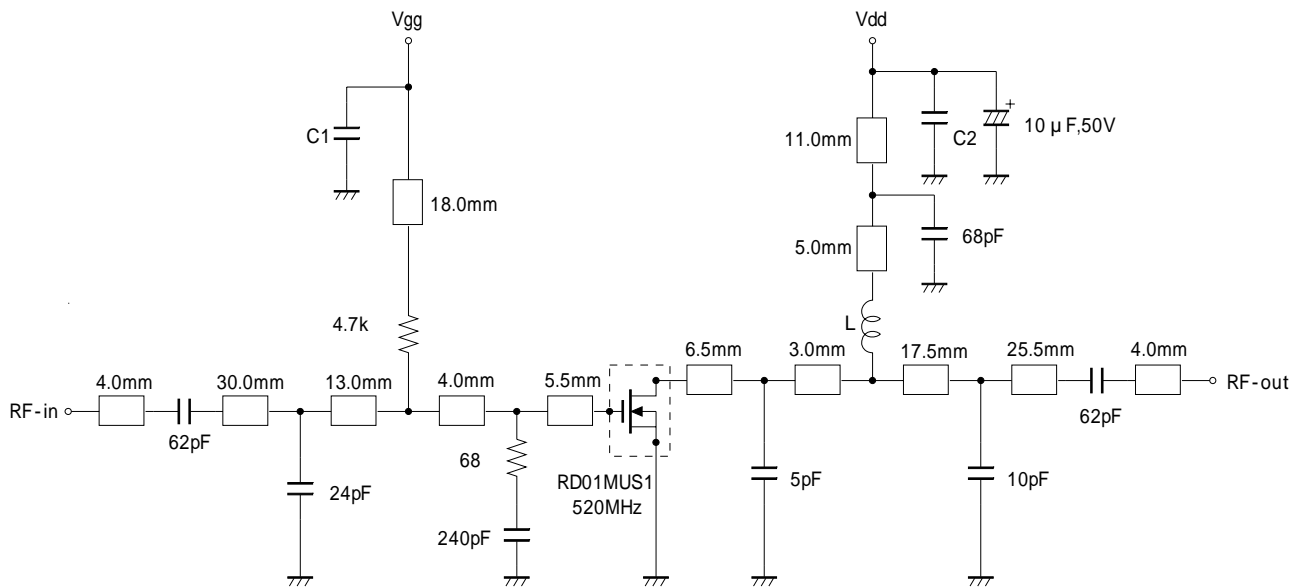


L:9Turns,D:0.43mm, 2.46(the outside diameter)
 Enameled wire(mm)
 C1,C2:1000pF,0.022 µ F in parallel

Note:Board material-glass epoxy substrate
 micro strip line width=1.0mm/50 , r:4.8,t=0.6mm
 W: line width=1.0mm



RD01MUS1 Equivalent Circuit (@f=520MHz)



L:5Turns,D:0.43mm, 2.46(the outside diameter)
 Enameled wire(mm)

C1,C2:1000pF,0.022 µ F in parallel

Note:Board material-glass epoxy substrate
 micro strip line width=1.0mm/50 , r:4.8,t=0.6mm

